Financial Assurance Materials (attache	<b>Financial</b>	Assurance	Materials	(attached
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Slide presentation

From: Galbraith, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0ABF7F5C1A5E462E8096CB58EF9757EB-MGALBRAI]

**Sent**: 7/6/2017 7:33:13 PM

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(FYDIBOHF23SPDLT)/cn=Recipients/cn=26404c78d3dc441f810ac723cf8f9d49-JBIEGELS]; Behan, Frank

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(FYDIBOHF23SPDLT)/cn=Recipients/cn=b37b3a6d67644ad3bf5717d99610941e-FBEHAN]; Gerhard, Sasha

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[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b9aaed0c9130464bb2bc9c8c7c265061-JSAGER]; Atagi, Tracy

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ebcfd670077440dfb63a691749f20af2-TATAGI]

CC: Chang, Patrick [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=45068ffdd29e4ae699263be4219d70a0-Chang, Patrick]; Celeste, Laurel

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8f5194a050ce4b758e02e6835fe0b43d-Celeste, Laurel]; Swetland-Johnson,

Karen [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a916f4dac0d84c3499b44ee837ae0205-Swetland, K]

BCC: DCRoomPYS6100Projector/DC-Potomac-Yard-South-ORCR [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=user8c17dd2e]

Subject: Tradebe and TDUs

Location: DCRoomPYS6100Projector/DC-Potomac-Yard-South-ORCR

**Start**: 7/27/2017 7:00:00 PM **End**: 7/27/2017 8:00:00 PM

Show Time As: Busy

DD Prebrief for OD brief scheduled for august 3 regarding tradebe

#### Agenda – June 20, 2017

The following issues will be discussed:

#### 1. Call Schedule and Participants List

Frank Behan (EPA/ORCR; behan.frank@epa.gov; 703-308-8476)

#### 2. Facilities with Thermal Desorption Units (TDUs) followed by Condensers

Mike Galbraith (EPA/ORCR; galbraith.mike@epa.gov; 703-605-0567)

Headquarters has been receiving inquiries about facilities that utilize thermal desorption units (TDUs) followed by condensers to recover, for example, hazardous waste-derived fuels, exempt used oil fuel or petroleum refinery inputs, or other exempt products (e.g., degreasers). Below is a list of facilities that we know of that may utilize TDUs and condensers. We would like to know if regions/states know of other facilities that take hazardous waste for processing in TDU's where the volatilized gases are subsequently routed thru condensers to produce some type of product. For purposes of this inquiry, it does not matter if the TDU's/condensers or subsequent pollution control equipment were determined to need a RCRA treatment permit.

- TDX/US Ecology (Robstown, TX)
- Rineco closed (Benton, AK)
- Chemical Waste Management (Oregon)
- Chemical Waste Management (Sulphur, LA)
- Clean Harbors (Region 6?)
- Thermaldyne (LA)
- Tradebe (East Chicago)
- Elcon Recycling (PA)
- Philips66 (exempt per 40 CFR 261.4(a)(12)(i) ? Region 6)
- Marathon (exempt per 40 CFR 261.4(a)(12)(i) ? -Region 6)
- Shell (exempt per 40 CFR 261.4(a)(12)(i) ? Region 6)

#### 3. BIF PM and Non-Mercury Metals Emission Controls for a Boiler

Katherine O'Neal (NC DEQ; Katherine.oneal@ncdenr.gov; 919-707-8209)

A facility in North Carolina could not meet the hazardous waste MACT standard for their new boiler and is pursuing a RCRA permit and must conduct a risk assessment. They assert in their most recent Class 3 modification submittal that they meet the Adjusted Tier I standards and only need to meet the operating requirements in 40 CFR 266.102(e)(4) which include:

- Total feed rate of each metal to the boiler
- Total feed rate of each hazardous waste

- An appropriate sampling and analysis program.

They did correctly determine the Adjusted Tier I limits for boiler #7 and they can meet the Adjusted Tier I feed rate limits per the rules for each metal.

However, they need to depend on the APCE and system removal to meet the emission rates modeled in the risk assessment. That is, the risk based feed rate limits depend on the SRE and site specific air modeling.

My question is: Does the facility officially need to meet Adjusted Tier I operating limits or the Tier III operating limits in 40 CFR 266.102?

I asked Region 4 this question last year and they agree the facility should meet Tier III standards. The facility has been told this, yet has gone back to claiming they should only be required to be Adjusted Tier I and only meet those operating standards. They have an issue with some of the Tier III operating standards and don't think they should be required to provide those specific limits.

I would like to know if there was a similar situation in the past and if anyone knows of policy decisions or preamble discussions addressing whether a facility is Tier IA or Tier III when they need the APCE to meet risk based limits.

#### 4. Additional Regional/State Issues

From: Galbraith, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0ABF7F5C1A5E462E8096CB58EF9757EB-MGALBRAI]

**Sent**: 6/7/2017 4:16:51 PM

To: Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=0abf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]; Atagi, Tracy

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ebcfd670077440dfb63a691749f20af2-TATAGI]; Gerhard, Sasha

[/o=ExchangeLabs/ou=Exchange Administrative Group

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[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=b37b3a6d67644ad3bf5717d99610941e-FBEHAN]

BCC: DCRoomPYS6731/DC-Potomac-Yard-South-ORCR [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=user7ef195fb]

Subject: tdus

Location: DCRoomPYS6731/DC-Potomac-Yard-South-ORCR

**Start**: 6/14/2017 1:00:00 PM **End**: 6/14/2017 2:00:00 PM

Show Time As: Busy

Continuation of tdu discussion – my hope is to send y'all a draft between briefing for the dds between now and then as well as a list of outstanding issues we need to research to support the briefing

From: Galbraith, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=0ABF7F5C1A5E462E8096CB58EF9757EB-MGALBRAI]

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To: Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

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[/o=ExchangeLabs/ou=Exchange Administrative Group

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BCC: DCRoomPYS6731/DC-Potomac-Yard-South-ORCR [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=user7ef195fb]

Subject: tdu round 3

Location: DCRoomPYS6731/DC-Potomac-Yard-South-ORCR

**Start**: 6/7/2017 1:00:00 PM **End**: 6/7/2017 2:00:00 PM

Show Time As: Busy

From: Gaines, Jeff [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C0CE5613E3C245B09C6CCAD71CF3062A-JGAINE02]

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To: Gaines, Jeff [/o=ExchangeLabs/ou=Exchange Administrative Group

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[/o=ExchangeLabs/ou=Exchange Administrative Group

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Subject: Canceled: tdu!!!

Location: DCRoomPYS6771/DC-Potomac-Yard-South-ORCR

**Start**: 5/23/2017 3:30:00 PM **End**: 5/23/2017 4:30:00 PM

Show Time As: Free

Importance: High

From: Galbraith, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

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To: Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=0abf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]; Behan, Frank

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BCC: DCRoomPYS6811VTC/DC-Potomac-Yard-South-ORCR [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=usercb6514b1]

Subject: tdu brainstorm part 2

Location: DCRoomPYS6811VTC/DC-Potomac-Yard-South-ORCR

**Start**: 5/23/2017 3:30:00 PM **End**: 5/23/2017 4:30:00 PM

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From: Lee, Jae [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6E8957DA9F254AAB83632814F05D1CD2-JLEE10]

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To: Lee, Jae [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6e8957da9f254aab83632814f05d1cd2-JLee10]; Galbraith, Michael

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=Oabf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]

**Subject**: Tradebe discussion **Location**: (703) 605-0567

**Start**: 5/2/2017 3:00:00 PM **End**: 5/2/2017 3:30:00 PM

Show Time As: Busy

Mike,

We can call you at (703) 605-0567

From: Lee, Jae [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6E8957DA9F254AAB83632814F05D1CD2-JLEE10]

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To: Lee, Jae [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6e8957da9f254aab83632814f05d1cd2-JLee10]; Valentino, Michael [Valentino.Michael@epa.gov]; Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0abf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]; Setnicar, Mary

[Setnicar.Mary@epa.gov]; John Naddy [JNADDY@idem.IN.gov]

CC: Behan, Frank [Behan.Frank@epa.gov]; Kohler, Amanda [Kohler.Amanda@epa.gov]; Young, Jessica

[Young.Jessica@epa.gov]; Atagi, Tracy [Atagi.Tracy@epa.gov]

Subject: Tradebe Discussion

Location: 1712

**Start**: 4/18/2017 6:00:00 PM **End**: 4/18/2017 7:00:00 PM

Show Time As: Busy

To: Fruitwala, Kishor[Fruitwala.Kishor@epa.gov]; Tidmore, Guy[tidmore.guy@epa.gov]; Luschek,

Robert[Luschek.Robert@epa.gov]; Young, Jessica[Young.Jessica@epa.gov]; Shah, Harry[shah.harry@epa.gov]; Galbraith,

Michael[Galbraith.Michael@epa.gov]

Cc: Gregg Meyers[gmeyers@tdxassociates.com]; George Hay[ghay@fmtinc.com]; Brian

Lindman[Brian.Lindman@usecology.com]

From: Carl Palmer

Sent: Mon 7/16/2018 1:08:14 PM

Subject: Thermaldyne Process Discussion pfd

Thermaldyne PFD Rev 1.pdf

We have prepared a heat and material balance for the Thermaldyne process as proposed for hazardous waste thermal treatment in Louisiana. It is attached. This PFD will be the primary material that we discuss on the call this afternoon.

We will also discuss the fact that in the variance as written by LDEQ, listed waste codes do not apply to 85% of the feed material that is generated as residuals from the hazardous waste recycling. This is contrary to the rulemaking for refinery OBHSM [ 261.4(a)(12) ] that clearly states that all residuals from refinery OBHSM recycling are listed waste F037. The variance as written by LDEQ states:

... Thermaldyne shall make a hazardous waste determination on any residuals generated from the reclamation of the OBHSM. The residuals are a point of new generation of material. Upon intent to be discard the residuals must be properly characterized and managed in accordance with Louisiana Solid Waste and/or Hazardous Waste Regulations as applicable.

The most likely interpretation of the above condition will be that TDU desorber solids will be tested for hazardous waste characteristics (D codes) and if below those levels will be discarded as non-hazardous industrial solid waste, at most. They will not be tested for LDR compliance for either F037 criteria, or UTS UHC criteria. This could also be done for the centrifuge cake that is not "reclaimed" in the TDU but rather simply discarded after centrifuging. Also, waste water that is spilled or otherwise discarded would not be subjected to F037 waste-water LDR testing.

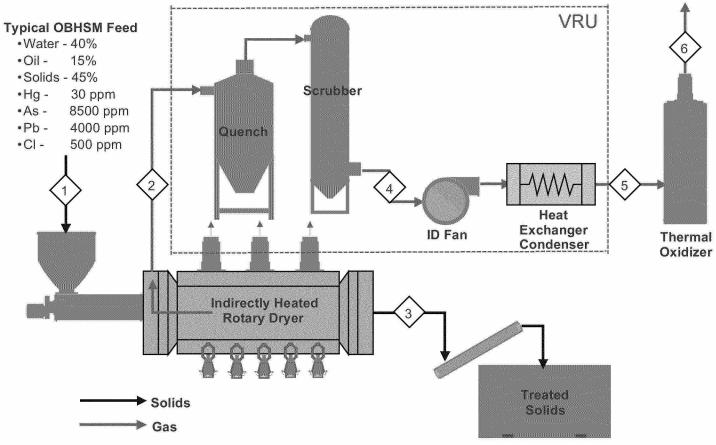
We'll talk at 1 Central.

Carl

\_\_

Carl R. Palmer, P.E. TD\*X Associates LP (919) 349-1583 mobile

### **Thermaldyne Process**



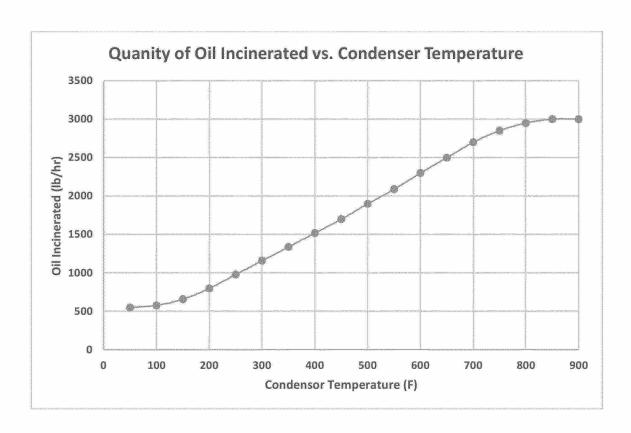
STF	REAM NO.	1	2	3	4	5	6
						HEAT	THERMAL
		SLUDGE	DRYER		SCRUBBER	EXCHANGER	OXIDIZER
	\	FEED	VENT	DRYER	EXHAUST	EXHAUST	EXHAUST
COMPONENT		TO DRYER	GAS	SOLIDS	GAS	GAS	GAS
CO2	LB/HR						2,041
O2	LB/HR		521		521	521	2,530
N2	LB/HR		1,729		1,729	1,729	15,472
H2O	LB/HR	8,000	8,017		9,303	369	1,236
SOLIDS / PARTICULATE	LB/HR	9,000	450	8,550	2.3	2.3	2.3
OIL / HYDROCARBONS	LB/HR	3,000	3,000		800	600	6
TOTAL MASS FLOW	LB/HR	20,000	13,717	8,550	12,355	3,221	21,286
VOLUMETRIC FLOW	ACFM		7,452	***************************************	5,495	971	18,715
LIQUID FLOW	GPM						
TEMPERATURE	°F	70	400	850	198	130	1600
PRESSURE	IN. W.C.	0.0	-1.0	0.0	-25.0	2.0	0.0
ENTHALPY	MM BTU/HR	0.1	10.8	1.7	10.6	0.5	10.3

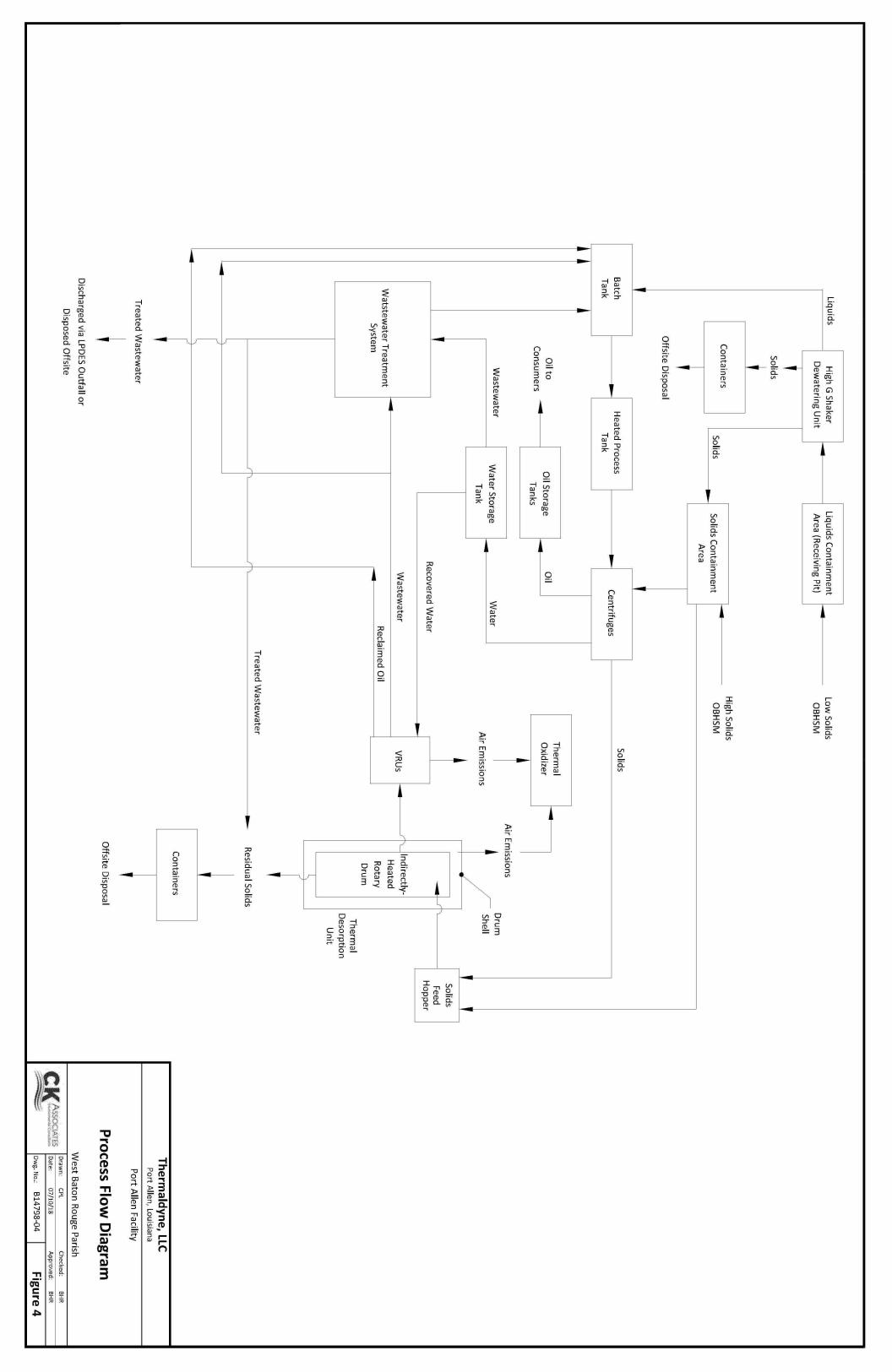
Stack Emissions 6	Units	MACT EEE	Thermaldyne	LDEQ Air Permit
Particulate Matter	gr/dscf	0.0016	0.09	No Limit
Dioxins and Furans	ng/dscm	0.2	2.2	No Limit
Mercury	ug/dscm	8.1	55,086	No Limit
Arsenic	ug/dscm	23	3,558	No Limit
Lead	ug/dscm	10	1,674	No Limit
HCI	ppmV	21	122	No Limit
Particulate Matter	lb/hr	0.040	2.28	No Limit
Dioxins and Furans	lb/hr	2.18E-09	2.40E-08	No Limit
Mercury	lb/hr	0.00009	0.6	No Limit
Arsenic	lb/hr	0.00025	0.039	No Limit
Lead	lb/hr	0.00011	0.018	No Limit
HCI	lb/hr	0.35	2.0	No Limit

The PFD and emissions estimates presented on the previous page assumed a conservative condenser outlet temperature of 130°F (Stream 5). But Section 3.2.4 of the Thermaldyne document "Verified Reclamation Facility Operation Description" describes the operation of the Vapor Recovery Unit as follows:

After the vent gas reaches the condenser (indirect heat exchanger), the gas temperature is reduced to less than 300°F to remove residual hydrocarbon vapors (the lighter hydrocarbons) from the gas stream. After gas exits the condenser, it is routed through a flame arrester before being discharged into the thermal oxidizer for final polishing prior to discharge to the atmosphere.

The quantity of hydrocarbon vapor that will be incinerated in the thermal oxidizer is a direct function of this condenser operating temperature as approximated in the following figure. At an OBHSM feed rate of 10 ton/hr and a condenser temperature of 300°F, over 1,100 lb/hr of oil contained in the feed will be incinerated in the thermal oxidizer. Since the permit does not impose any operating restrictions or temperature limits of any kind, there is actually no limit on the amount of oil that may be incinerated at the proposed Port Allen facility.





From: Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=Oabf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]

**Sent**: 7/18/2018 11:21:35 AM

To: Valdez, Heather [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=eb323347294d44009a369c3576798bdf-Valdez, Heather]

Subject: Accepted: Hazardous Waste Thermal Desorption

Location: R10Sea-ConfLineMM-206-224-0053

**Start**: 7/20/2018 6:30:00 PM **End**: 7/20/2018 7:30:00 PM

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17170 PERKINS ROAD BATON ROUGE, LA 70810 PHONE (225) 755-1000

LDEQ REDED TWO CX a.com

PM 4:408 TON, TX PHONE (281) 397-9016 FAX (281) 397-6637

LAKE CHARLES, LA FHONE (337)625-6577 FAX (337)625-6580

SHREVEPORT, LA PHONE (318) 797-8636 FAX (318) 798-0478

2018 JUN 29

June 29, 2018

HAND DELIVERED

Louisiana Department of Environmental Quality
Office of Environmental Services
Permits Division
602 North Fifth Street
Baton Rouge, Louisiana 70802

Re:

**Small Source Permit Modification Application** 

Thermaldyne, LLC – Port Allen Facility
Agency Interest Number 198467
Permit Number 3120-00116-00
CK Project Number 14764

144018000

Dear Administrator:

On behalf of Thermaldyne, LLC (Thermaldyne), CK Associates is submitting the enclosed Small Source Permit Modification Application. The facility is a minor source of criteria pollutants and of Chapter 51 toxic air pollutants and is currently permitted under Permit No. 3120-00116-00 issued November 16, 2015.

As required by the Louisiana Department of Environmental Quality (LDEQ), Thermaldyne is submitting three copies of this permit application. A check in the amount of \$500 (Fee Code 1722) is also included to cover the review fees.

If you have any questions or would like further information, please contact Richard Cates of Thermaldyne at (337) 288-4600 or me at (225) 755-1000.

Sincerely,

**CK** Associates

Kerry Brouillette

Air Quality Program Manager

Enclosures: As stated

cc: Richard Cates - Thermaldyne

# RECEIPT OF CHECK

Master Al #:

198467

Name on Check:

CK Associates, LLC

Master File Name:

Thermaldyne LLC - Port Allen Facility

Check Received Date: 6/29/2018

Check Date:

6/29/2018

Check Number:

52566

Check Amount (\$):

\$500.00

Staff Entry:

**SUNSHINEM** 

Date data entered:

7/2/2018

Media:

AIR

Reason:

Modification

Comments:

# SMALL SOURCE PERMIT MODIFICATION APPLICATION



Thermaldyne, LLC
Port Allen, Louisiana
West Baton Rouge Parish
Agency Interest No. 198467

June 2018

Prepared by:



17170 Perkins Road Baton Rouge, LA 70810 225-755-1000

CK Project Number: 14764

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1.1	Process Description	
1.2	Proposed Modifications	(
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Table 1 Facility Emissions Summary

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Figure 1 Site Location Map

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Appendix A Emission Calculations

#### 1.0 INTRODUCTION

Port Allen Land, LLC (PAL) applied for a small source permit in March of 2015 for a recovery/recycling facility to be located in West Baton Rouge Parish. Consequently, Small Source Permit No. 3120-00115-00 was issued on May 4, 2015. In August of 2015, an application was submitted to modify the permitted location of the facility. Permit No. 3120-00115-00 was terminated and Permit No. 3120-00116-00 was issued, both effective November 16, 2015. On May 3, 2016, Permit No. 3120-00116-00 was transferred from PAL to Thermaldyne, LLC (Thermaldyne) for the Port Allen Facility.

Thermaldyne owns and will operate the Port Allen Facility. The facility reclaims oil from oil-bearing hazardous secondary materials (OBHSM) by utilizing a 3-phase centrifuge process and an indirect thermal desorption (ITD) process. The OBHSM consists of sludges, byproducts, spent or other oil-bearing materials generated at petroleum refineries and related oil and gas operations such as pipeline systems and tank terminals. The oil that is reclaimed is returned to petroleum refineries for reinsertion into the refining process or sold as fuel in the fuel blending market. The permitted site is on approximately 28.2 acres at 2325 North Line Road in Port Allen, Louisiana in West Baton Rouge Parish. A Site Location Map is provided as Figure 1.

This Application for Approval of Emissions of Air Pollutants (AAEAP) from Minor Sources (Section 2.0) is being submitted by Thermaldyne for a modification of the permit to incorporate design changes. The facility meets the definition of small source: a facility that has the potential to emit less than 25 tons per year of any criteria pollutant, less than 10 tons per year of any toxic air pollutant, and is not otherwise considered a major source.

#### 1.1 Process Description

#### **Processing within Material Handling Building**

All OBHSM will be unloaded within the Material Handling Building into either the Liquids Containment Area (Low Solids OBHSM) or within the Solids Containment Area (High Solids OBHSM).

The Liquids Containment Area consists of a concrete lined pit and a dewatering unit (a High Gravity linear shaker). The Liquids Containment Area is located in the northeast corner of the Material Handling Building. The Low Solids OBHSM will be unloaded into the Liquids Containment Area Pit then transferred via submersible pump into the dewatering unit (a High Gravity linear shaker). The liquid stream from the dewatering unit will be transferred via pipe to the Thermal Pad for processing in the centrifuge

system. The solid stream from the dewatering unit will be transferred via front loader to the Solids Containment Area.

The Solids Containment Area consists of that portion of the Material Handling Building not occupied by the Liquids Containment Area or other structures. The High Solids OBHSM will be unloaded within the Solids Containment Area and transferred via an auger conveyor to the Thermal Desorption Unit (TDU) for processing.

Air inside the Material Handling Building will be controlled by carbon canisters using induced draft. The control system is designed to operate with better than 75% capture and 99% control efficiency.

OBHSM will be stored within suitable physical enclosures provided with appropriate dust/vapor control measures to prevent and minimize potential fugitive emissions. Dust curtains will be used to contain potential fugitive releases, preventing release of particulate matter outside of the product receiving building. When totally enclosed, the building will operate under negative pressure.

#### **Processing on Thermal Pad**

OBHSM will be processed on the Thermal Pad in the centrifuge system and the TDU. The centrifuge system will separate the Low Solids OBHSM into individual streams: water, oil, and solids. The water will be processed through the wastewater treatment plant (also located on the Thermal Pad). The oil will be collected in tanks or containers. The solids will be conveyed to the Solids Containment Area (located in the Material Handling Building) prior to conveyance into the TDU for further reclamation.

#### Low Solids OBHSM

Low Solids OBHSM consists of mostly water (i.e., 70-90%) with the remaining mixture consisting of various oil and solids. Low Solids OBHSM is typically received in vacuum trucks or vacuum containers and pumped into the Liquids Containment Area.

The Liquids Containment Area will include a concrete lined pit with a capacity of approximately 28,726 gallons. The Liquid Containment Area, including the pit, will be located within the Material Handling Building to prevent rainwater from coming into contact with the material.

The OBHSM will be transferred from the pit to the dewatering system via a submersible slurry pump for screening through a High Gravity linear shaker. The liquid stream from the dewatering unit will be transferred via pipe to the Thermal Pad for processing in the centrifuge system. The solid stream from the dewatering unit will be transferred via front loader to the Solids Containment Area.

#### High Solids OBHSM

High Solids OBHSM consists of mostly solids (i.e., 40 - 70%), with the remaining volume consisting of oil and water. High Solids OBHSM are typically received in roll-off boxes or other containers. High Solids OBHSM will be offloaded into the Solids Containment Area and transferred via an auger conveyor to the TDU for processing.

#### Centrifuge Process

All Low Solids OBHSM will be screened over a High Gravity linear shaker and then fed to one of three 3-phase tricanting centrifuges. Water, oil, and solids will be separated into individual streams. The water will be processed through the wastewater treatment plant and then discharged or disposed. The solids will be conveyed to the TDU for further processing and recovery.

#### **Thermal Desorption Process**

Thermaldyne will use an indirect TDU to reclaim the OBHSM. Indirect thermal desorption is a non-incineration technology designed to separate hydrocarbons from various matrices including oilfield waste, soil, sludge, sand, filter cake, tank and tanker bottoms, and contaminated soil. Thermaldyne will limit OBHSM that it receives to that generated at petroleum refineries and related oil and gas operations such as pipeline systems and tank terminals. This proven thermal desorption technology is currently used to reclaim oil from oil-containing materials within petroleum refineries and at numerous commercial facilities.

In the indirect heating process, heat is applied to the exterior of the heating chamber and is transferred through the wall of the chamber to the OBHSM. Neither the burner flame nor the combustion gases come in contact with the OBHSM or the off-gases. This type of TDU is designed to maximize the recovery of the volatilized contaminants from the off-gases.

#### Feed System

The main components of the feed system will include single or dual-feed hoppers for material storage. The hoppers are furnished with variable speed screw auger systems in the bottom for discharge of difficult to convey material. Feed hoppers will be loaded using a front-end loader or crane operated clam-shell type bucket.

After material is discharged from a hopper, it travels via single or dual enclosed conveyors to the inlet of the TDU. The TDU feed rate is controlled by adjusting the speed of the rotation of the screw-auger system in the feed hopper bottom while all other conveying components operate at constant speed. Material preparation and pre-

treatment might be necessary during certain projects to assure good material conveying and oil reclamation.

#### Indirectly Heated Rotary Drum

The primary function of the indirectly heated rotary drum is to vaporize the hydrocarbons and the moisture from the incoming material. The indirectly heated drum is designed to operate at temperatures ranging from 1,200°F –1,600°F. The rotary drum is heated from outside where several burners provide the necessary process heat. The natural gas-fired unit will operate at up to 18 MMBTU per hour. The rotary drum shell material and the furnace burner capacity are designed to elevate the OBHSM temperature up to 900°F, although these higher operating temperature ranges are rarely necessary for material processing under normal conditions. The drum's material inlet and discharge are controlled via two airlocks designed to minimize air (oxygen) leakage into the drum. The inlet and discharge end of the rotary drum are equipped with custom designed seals to prevent air leakage.

During the reclamation process, as the OBHSM progresses through the rotary drum, the hydrocarbons and water undergo the evaporation (desorption) process while generating very dry solid residuals. The processed solids are conveyed at a high temperature into a conveyor where it is mixed with water for cooling before being discharged. The desorbed vapors are transported from the rotary drum into the system's Vapor Recovery Unit (VRU).

#### Vapor Recovery Unit

The main function of the VRU is to condense and recover the desorbed hydrocarbons, water vapor, and the solid particles present in the gas stream exiting the rotary drum. The VRU includes several main components including a quench section, venturi scrubber, separator, mist eliminator section, induced draft fan, and condenser. In the quench section, the gas stream is cooled by direct contact with finely atomized water droplets via multiple nozzles. The water spray system also removes additional solids from the gas stream.

As the gas temperature is reduced, most of the hydrocarbons are condensed before gases exit the quench section. The VRU is equipped with an integrated variable throat Venturi scrubber which removes fine solid particles from the gas stream. The dust-laden gas stream and the process water collide, dispersing the liquid into droplets that the particles impact and become entrapped within. These droplets, containing the fine solid particles, are removed from the gas stream in a horizontal cyclonic separator downstream of the Venturi scrubber.

The gas exiting the cyclonic separator passes through a mist eliminator to remove entrained water droplets before reaching the system ID fan. The process ID fan is equipped with a variable speed controlled drive, designed to maintain sufficient draft through the system to continuously transfer the vent gas through the process and control equipment. After the vent gas reaches the condenser (indirect heat exchanger), the gas temperature is reduced to less than 300°F to remove residual hydrocarbon vapors (the lighter hydrocarbons) from the gas stream.

After gas exits the condenser, it is routed through a flame arrester before being discharged into the thermal oxidizer for final polishing prior to discharge to the atmosphere.

#### **Process Water System and Treatment**

The condensates, residual fines/sediments, and water collected inside the VRU will be treated in an above ground API-type primary oil/water separator equipped with a fixed cover for VOC emission control. The recovered oil is collected using a stationary skimmer and is continuously pumped into an above ground storage tank. The recovered sediments/sludge is pumped from the API separator using a pneumatic pump and is recycled back into the TDU process. After the oil and suspended solids are removed from the influent in the API separator, the middle phase (water) is then pumped to an on-site storage tank for recycling.

A portion of the recovered water is pumped into a plate and frame heat exchanger where it is cooled and reused as cooling process water for the VRU. The cooling media for the plate and frame heat exchanger is also water. A portion of the water recaptured in the process will be processed through the wastewater treatment plant and also used to rehydrate residue from the thermal process. Water not recycled into the reclamation process and contact stormwater will be collected in containers (e.g., frac tanks) prior to treatment in its onsite wastewater treatment system.

Four package boilers will be utilized to generate steam (one on stand-by) for use in heating the heavier sludge materials to increase the ability to move these through the process.

Non-specified area sources can generate fugitive emissions from equipment that is in potential VOC service. These emissions are very small. Other emissions are from insignificant activities.

#### 1.2 Proposed Modifications

This proposed action fits the definition of a minor modification as per LAC 33:III.525.A. Thermaldyne is requesting that minor modification procedures be used when processing this permit application. With this modification application, Thermaldyne is proposing several changes, described below.

Thermaldyne proposes to change the description of UNF 0001 from PAL LLC — Entire Facility-Port Allen Land, LLC to Thermaldyne, LLC — Entire Facility.

Thermaldyne proposes to change the description of CON 0002 from TDU Oxidizer Vent to Thermal Oxidizer.

Thermaldyne proposes to delete CON 0001, CSTK-1 — TDU Oxidizer/Desorber Common Stack to remove permitting of a common stack. The emissions that are currently permitted under CON 0001 are now proposed to be permitted under CON 0002, 1-2015 — Thermal Oxidizer and EQT 0008, 2-2015 — Desorber Heater (separate stacks).

There are no proposed changes to the Desorber Heater emission rates. The Thermal Oxidizer (CON 0002) is now proposed to only control the TDU Desorber Vent (EQT 0001) whereas in the current permit, CON 0002 controls:

- EQT 0001, 1-2015(a) TDU Desorber Vent;
- EQT 0002, 1-2015(b) Oil/Water Separator;
- EQT 0003, 1-2015(ca) TK-1;
- EQT 0004, 1-2015(cb) TK-2;
- EQT 0005, 1-2015(cc) TK-3;
- EQT 0006, 1-2015(cd) —TK-4; and
- EQT 0007, 1-2015(ce) TK-5.

Tanks 1-5 (EQT 0003 through EQT 0007, TK-1 through TK-5) are proposed to be deleted. These tanks are permitted for product, water treatment, mixing, and diesel. In the place of the product, mixing, and diesel tanks, Thermaldyne proposes to add the following atmospheric tanks:

- EQT TBD, 12-2018 Product Tank No. 1;
- EQT TBD, 13-2018 Product Tank No. 2;
- EQTTBD, 14-2018 Oil Tank No. 1;
- EQT TBD, 15-2018 Water Tank No. 1;
- EQT TBD, 16-2018 Water Tank No. 2 (from Centrifuge);
- EQT TBD, 17-2018 Oil Tank No. 2 (from Centrifuge);
- EQTTBD, 18-2018 Blending Tank No. 1;
- EQT TBD, 19-2018 Blending Tank No. 2;
- EQT TBD, 20-2018 Process Tank No. 1;

- EQT TBD, 21-2018 Process Tank No. 2; and
- EQT TBD, 22-2018 Process Tank No. 3.

EQT 0002, 1-2015(b) — Oil/Water Separator is proposed to change to EQT 0002, 11-2018 — Wastewater Treatment System. Included with the system will be replacement tanks for EQT 0004 and EQT 0005 mentioned above that are currently permitted for water treating chemicals.

Thermaldyne proposes to rename EQT 0011, 6-2015 — Package Boiler to Package Boiler No. 1 and to add the following sources:

- EQT TBD, 7-2018 Package Boiler No. 2;
- · EQT TBD, 8-2018 Package Boiler No. 3; and
- EQTTBD, 9-2018 Package Boiler No. 4.

The following emission point sources are also proposed to be added:

- EQT TBD, 10-2018 Material Handling Building;
- EQT TBD, 23-2018 Roll-off Boxes;
- EQT TBD, 24-2018 TDU Solids Loading;
- EQTTBD, 25-2018 Finished Catalyst Loading;
- EQT TBD, 26-2018 Catalyst Solids Loading;
- EQT TBD, 27-2018 Catalyst Screening;
- EQT TBD, 28-2018 Processed Solids Discharge Conveyor; and
- EQT TBD, 29-2018 Emergency Diesel Generator.

Thermaldyne proposes to delete EQT 0010, 5-2015 — Baghouse. Material handling located in the Material Handling Building (EQT TBD, 10-2018) is proposed to be controlled with capture (75% efficiency) and scrubber/carbon bed control (99% efficiency).

There are no proposed changes to the fugitives (FUG 0001, 3-2015 – Fugitive Emissions) or loading (EQT 0009, 4-2015 – Loading Emissions) emission rates.

Thermaldyne proposed to increase the number of tank cleanings for the current permitted GCXVII Activity and add carbon bed maintenance and strainer maintenance. New Insignificant Activities proposed are two (2) diesel tanks per LAC 33:III.501.8.5.A.3.

#### 1.3 Regulatory Applicability

Section 19 of the AAEAP contains the air quality requirements for the affected sources included in this minor source permit modification application.

Thermaldyne requests removal of LAC 33:III.1311.C from CON 0002, EQT 0008, and EQT 0011 and the addition of LAC 33:III.1313.C to CON 0002 and EQT 0011.

#### 1.4 Proposed Emission Changes

With this modification, the facility will remain a minor source of regulated air pollutants. Tabulated emissions are provided in Table 1 below.

Table 1
Facility Emissions Summary

Pollutant	Permitted Emissions (tpy)	Proposed Emissions (tpy)	Net Change (tpy)
PM <sub>10</sub>	4.57	1.52	-3.05
PM <sub>2.5</sub>	4.57	1.50	-3.07
SO <sub>2</sub>	0.14	0.13	-0.01
NO,	11.81	20.15	8.34
CO	18.03	18.22	0.19
Total VOC	20.00	24.48	4.48

2.0 APPLICATION FOR APPROVAL OF EMISSIONS OF AIR POLLUTANTS FROM MINOR SOURCES

Department of Environmental Quality
Office of Environmental Services
Air Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313
(225) 219-3417

# **LOUISIANA**

## Application for Approval of Emissions of Air Pollutants from Minor Sources



1. Facility Information [LA			PE OR PRINT	Γ		1 - Caracter (1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777 - 1777	
Facility Name (if any)						•••••	
Port Allen Facility							
Agency Interest Number (A.I. Nu	nber)		Currently I	Effectiv	e Permit Number(	s)	
198467		3120-0011	6-00				
Company - Name of Owner Thermaldyne, LLC							
Company - Name of Operator (if different from Owner)							
Parent Company (if Company - Na	ime of Owner	r given ab	ove is a divis	ion)			
Ownership: Check the appropriate box.				***************************************			
corporation, partnership, or sole pr	oprietorship	☐ regui	ated utility		municipal gove	ernment	
state government		☐ feder	al governmen	it	other, specify	LLC	
2. Physical Location and F [LAC 33:III.517.D.18, unless What does this facility produce? Add This facility processes oil-bearing	otherwise s more rows as	tated] necessary	ŧ.	or oil red	clamation.		
What modifications/changes are prop See Section 1.2 of the report text.	osed in this a	pplication	? Add more ro	ows as n	ecessary.		
Nearest town (in the same parish as Port Allen	the facility):		Parish(es) west Baton		acility is located:		
Distance To (mi):	<u>142</u> Texas	<u>170</u>	Arkansas	<u>32</u> ?	Mississippi	166 Alabama	
Latitude of Facility Front Gate:	<u>30</u> Deg	<u>29</u> N	1in	<u>26</u> S	Sec	0.3 Hundredths	
Longitude of Facility Front Gate:	<u>-91</u> Deg	13 N	Min <u>06</u> Sec		Sec	0.01 Hundredths	
Add physical address and description of location of the facility below. If the facility has no address, provide driving directions. Add more rows as necessary.  2325 North Line Road, Port Allen, LA 70767							
	***************************************						
<ul> <li>         Map attached (required per LAC :</li></ul>	ucts attached ( oposed project	required p attached (	required per L	AC 33:			

1

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(required per LAC 33:III.513.C.1.a; for Portable Facilities only)

3. Conf	idential	ity [LAC 33.I.0	Chapter 5]				
Are you rec	nuesting co	infidentiality for an	y information <u>except c</u>	ur pollutant emissie	enrates? [	□Yes 図No	
If "yes," list the sections for which confidentiality is requested below. Add rows as necessary. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult instructions.							
4. Type	of App	ication [LAC	33:III.517.D)				
Check all t		•	*				
<u> </u>	***********************		Source 🛛 Small Sou	irce	acility		
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Does this s	ubmittal u	ndate or replace an	application currently r	mder review? 🗖 '	Ves M N	ŽA	
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			npted (e.g., Small Sou	rce Exemption; LA	.C 33:III.5	01.B.2.d)	
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5. Fee	informa	ition [LAC 33:	HL517.D.17]				
Fee Paran parameter		e fee code is based	on an operational para	imeter (such as nur	nber of en	iployees or capital	cost), enter tha
		: Enter the Standar	d Industrial Classifica	tion (SIC) Codes th	nat apply t	o the facility.	
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Secondary	SICC(s)						
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CODE	TYPE	CAPACITY	CAPACITY INCREASE	MULTIPLIER	NSPS	AIR TOXICS	TOTAL AMOUNT
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					GRA	ND TOTAL	\$500
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not paying the permit application fee using EFT EFT Transaction Number	Date of Subn	nittal Total Dollar Am S	
6. Key Dates			
Estimated date construction will commence:	On-going	Estimated date operation will commence:	9/1/18
7. LAC 33:I.1701 Requirements – renewals - ☐ Yes ⊠ No	Answer all	below for new sources and perm	nit
Does the company or owner have federal or stapermit for which you are applying in Louisiana partnerships, corporations, or other entities we participate in the environmental management interest in the permit.) \( \sumboxed{\text{Yes}} \sumboxed{\text{No}} \)	a or other states? ho own a control.	(This requirement applies to all individuals, ling interest of 50% or more in your company	i, or who
If yes, list States:			
Do you owe any outstanding fees or final pena If yes, explain below. Add rows if necessary.	lties to the Depar	tment?	
Is your company a corporation or limited liabil If yes, attach a copy of your company's Cert Secretary of State. The appropriate certific appendix.	tificate of Regist	ration and/or Certificate of Good Standing	

Electronic Fund Transfer (EFT): If paying the permit application fee using an Electronic Fund Transfer (EFT), please

#### 8. Certification of Compliance With Applicable Requirements

Statement for Applicable Requirements for Which the Company and Facility Referenced In This Application Is In Compliance

Based on information and belief, formed after reasonable inquiry, the company and facility referenced in this application is in compliance with and will continue to comply with all applicable requirements pertaining to the sources covered by the permit application, as outlined in Tables 1 and 2 in the permit application. For requirements promulgated as of the date of this certification with compliance dates effective during the permit term, 1 further certify that the company and facility referenced in this application will comply with such requirements on a timely basis and will continue to comply with such requirements.

For corporations only: By signing this form, I certify that, in accordance with the definition of Responsible Official found in LAC 33:III.502, (I) I am a president, secretary, treasurer, or vice-president in charge of a principal business function, or other person who performs similar policy or decision-making functions; or (2) I am a duly authorized representative of such person; am responsible for the overall operation of one or more manufacturing, production, or operating facilities addressed in this permit application; and either the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or the delegation of authority has been approved by LDEQ prior to this certification.\*

**CERTIFICATION:** I certify, under provisions in Louisiana and United States law which provide criminal penalties for false statements, that based on information and belief formed after reasonable inquiry, the statements and information contained in this Application for Approval of Emissions of Air Pollutants from Minor Sources, including all attachments thereto and the compliance statement above, are true, accurate, and complete.

Name		
Richard Cates		
Title		
President		
Company		************
Thermaldyne, LLC		
Suite, mail drop, or divisio	n	
	***************************************	**********
Street of P.O. Box		
45 Maryeanna Drive	State	Zip
45 Maryeanna Drive City		Zip 30342
45 Maryeanna Drive City Atlanta		
45 Maryeanna Drive City Atlanta Business phone		
Street or P.O. Box 45 Maryeanna Drive City Atlanta Business phone 337-288-4600 Email Address		

\*Approval of a délegation of authority can be requested by completing a Duly Authorized Representative Designation Form (Form, 7218) available on LDEQ's website at http://deq.louisiana.gov/page/air-permit-applications

#### Personnel [LAC 33:III.517.D.1]

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## 10. Proposed Project Emissions [LAC 33:III.517.D.3]

List the total emissions following the proposed project for this facility or process unit (for process unit-specific permits).

Speciate all criteria pollutants, TAP, and HAP for the proposed project.

Proposed Emission Rate (tons/yr)
1.52
1.50
0.13
20.15
18.22
24.48
22,166
0.56
0.002
0.002
0.004
0.003
0.02
0.11
0.01
0.002
0.002
0.002
0.14
0.03
0.002
0.27

#### 11. History of Permitted Emissions [LAC 33:III.517.D.18]

List each of the following in chronological order:

- The Permit Number and Date Action Issued for each air quality permit that has been issued to this facility or process unit (for process unit-specific permits) within the last ten (10) years.
- All small source exemptions, authorizations to construct, administrative amendments, case-by-case insignificant
  activities, and changes of tank service that have been approved since the currently effective Title V Operating
  Permit or State Operating Permit was issued to this facility or process unit (for process unit-specific permits). It
  is not necessary to list any such activities issued prior to the issuance of the currently effective Title V Operating
  Permit or State Operating Permit, if one exists.

Permit Number	Date Action Issued
3120-00115-00	5/4/2015
	Permit was terminated 3/14/16
3120-00116-00	3/14/16

12.a. Enforcement A	ctions [LAC 33:]	[H.517.D.18]-	Yes 🛭 No		
date that the action was issued	of the currently effectively or its tracking number), I. Summarize the condi	e Title V Operating Pe the regulatory authorit tions imposed by the e	ermit or State C y or authoritie nforcement act		
Type of Action or Tracking Number	Issuing Authority	Date Action	ı Issued	Summary of Conditions Included?	
				□Yes □No	
				□Yes □No	
12.b. Schedule for Compliance [LAC 33:III.517.D.16] ☐ Yes ☒ No  If the facility for which application is being made is not in full compliance with all applicable regulations, give a description of how compliance will be achieved, including a schedule for compliance below. Add rows as necessary. See instructions.					
13. Letters of Approval for Alternate Methods of Compliance- ☐ Yes ⊠ No					
	ance with any applicable I by the letter. Attach a	regulations for this fa	cility. List the	date of issuance of the letter ents referenced in this table.	
			·····	Copy of Letter Attached?	
				☐ Yes ☐ No ☐ Yes ☐ No	
				☐ Yes ☐ No	
		***************************************		Yes No	
				Yes No	
14. Initial Notification	ons and Perform	ance Tests ILAC	C 33:HIL517		
If yes, list any initial notification for this facility since the issue	ations that have been su rance of the currently el equirements. Any initia listed in Section 19, Ta	bmitted or one-time perfective Title V Operat I notification or one-tible ble 2 of this applicatio	erformance tes ing Permit or ! me performanc n. Any notific	ts that have been performed State Operating Permit in se test requirements that have sations or performance tests	
Initial Notification or One-time Performance To	est? Regulatory	Regulatory Citation Satisfied I		Date Completed/Approved	

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#### 15. Air Quality Dispersion Modeling [LAC 33:III.517.D.15]

	{		Louisiana Toxic Air Pollutant
		enter a summary of the most recent in the table. Add rows to table as n	results in the following table. If the ecessary.
☐ Yes 図 No If yes, enter the date	the most recent Air Quali	ty Dispersion Modeling results as re	quired by LAC 33:III were submitted:
			ver been performed for this facility in uired by other regulations AND approved
	Modeling is required when	ired by LAC 33:111 performed in sup 1 requested by LDEQ.)	por oj ma permi upparanos: 7710

**Ground Level Concentration** 

Ambient Air Quality Standard (NAAQS)

#### 16. General Condition XVII Activities [LAC 33:III.537]- ⊠ Yes ☐ No

Enter all activities that qualify as Louisiana Air Emissions Permit General Condition XVII Activities.

- Expand this table as necessary to include all such activities.
- See instructions to determine what qualifies as a General Condition XVII Activity.
- Do not include emissions from General Condition XVII Activities in the proposed emissions totals for the permit application.

The "Schedule" blank for each proposed General Condition XVII Activity is a required entry.

		Emission Rates - TPY							
Work Activity	Schedule	PM <sub>10</sub>	SO:	NO,	CO	VOC	Other		
Tank Cleaning T	wenty per year					3.03 tpy			
on Bed Maintenance T	wice per month			***************************************		0.12 tpy	***************************************		
ainer Maintenance C	Ince per month					0.04 tpy	***************************************		
						0.04 tpy			

#### 

Enter all activities that qualify as Insignificant Activities.

- Expand this table as necessary to include all such activities.
- For sources claimed to be insignificant based on size or emission rate (LAC 33:III.501.B.5.A), information must be supplied to verify each claim. This may include but is not limited to operating hours, volumes, and heat input ratings.
- If aggregate emissions from all similar pieces of equipment claimed to be insignificant are greater than 5 tons per
  year for any pollutant, then the activities can not be claimed as insignificant and must be represented as permitted
  emission sources. Aggregate emissions shall mean the total emissions from a particular insignificant activity or
  group of similar insignificant activities (e.g., A.1, A.2, etc.) within a permit per year.

Emission Point ID No.	Description	Physical/Operating Data	Citation
IA No. 1	Diesel Tank	1,000 gal	LAC 33:III.501.B.5.A.3
IA No. 2	Diesel Tank	250 gal	LAC 33:III.501.B.5.A.3

# 18. Regulatory Applicability for Commonly Applicable Regulations — Answer all below [LAC 33:III.517.D.10] Does this facility contain asbestos or asbestos containing materials? ☐ Yes ☐ No If "yes," the facility or any portion thereof may be subject to 40 CFR 61, Subpart M, LAC 33:III.Chapter 27, and/or LAC 33:III.5151, and this application must address compliance as stated in Section 19 of this application. Is the facility represented in this permit subject to 40 CFR 68? ☐ Yes ☐ No If "yes," the entire facility is subject to 40 CFR 68 and LAC 33:III.Chapter 59, and this application must address compliance as stated in Section 19 of this application. Is the facility listed in LAC 33:III.5611? Table 5 ☐ Yes ☐ No Table 6 ☐ Yes ☐ No Does the applicant own or operate commercial refrigeration equipment normally containing more than 50 pounds of refrigerant at this facility? ☐ Yes ☐ No If "yes," the entire facility is subject to 40 CFR 82, Subpart F, and this application must address compliance as stated

in Section 19 of this application.

#### 19. Applicable Regulations, Air Pollution Control Measures, Monitoring, and Recordkeeping

Important points for Table 1 [LAC 33:III.517.D.10]:

- List in Table 1, by Emission Point ID Number and Descriptive Name of the Equipment, state and federal
  pollution abatement programs and note the applicability or non-applicability of the regulations to each
  source
- Adjust the headings for the columns in Table 1 as necessary to reflect all applicable regulations, in addition
  to any regulations that do not apply but require an explanation to substantiate this fact.
- For each piece of equipment, enter "1" for each regulation that applies. Enter "2" for each regulation that applies to this type of source, but from which this source of emissions is exempt. Enter "3" for equipment that is subject to a regulation, but does not have any applicable requirements. Also, enter "3" for each regulation that has applicable requirements that apply to the particular emission source, but the regulations currently do not apply due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulations have been in place.
- Leave the spaces blank when the regulations clearly would not apply under any circumstances to the source.
   For example, LAC 33:III.2103 Storage of Volatile Organic Compounds would never apply to a steam generating boiler, no matter the circumstances.
- Consult instructions.

#### Important points for Table 2 [LAC 33:III.517.D.10]:

- For each piece of equipment listed in Table 2, include all applicable limitations, recordkeeping, reporting, monitoring, and testing requirements. Also, include any one-time notification or one-time performance test requirements that have not been fulfilled.
- Each of these regulatory aspects (limitations, recordkeeping, reporting, etc.) should be addressed for each
  regulation that is applicable to each emissions source or emissions point.
- For each regulation that provides a choice regarding the method of compliance, indicate the method of
  compliance that will be employed. It is not sufficient to state that all compliance options will be employed,
  though multiple compliance options may be approved as alternative operating scenarios.
- · Consult instructions.

#### Important points for Table 3 [LAC 33:III.517.D.16]:

- Each time a 2 or a 3 is used to describe applicability of a source in Table 1, an entry should be made in Table 3 that explains the exemption or non-applicability status of the regulation to that source.
- Fill in all requested information in the table.
- The exact regulatory citation that provides for the specific exemption or non-applicability determination should be entered into the "Citation Providing for Exemption or Non-applicability" column.
- Consult Instructions.

#### Important points for Table 4 [LAC 33:HL517.D.18]:

- List any single emission source that routes its emissions to another point where these emissions are commingled with the emissions of other sources before being released to the atmosphere. Do not list any single emission source in this table that does not route its emissions in this manner.
- List any and all emission sources that are routed as described above. This includes emission sources that do
  not otherwise appear in this permit application.
- Consult instructions.

#### TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS

#### Thermaldyne, LLC - Port Allen Facility West Baton Rouge Parish, Louisiana

Source		LAC 33:III.Chapter									LAC 93:III					
ID No.:	Descriptive Name of the Source	3	9	- 11	13	15	22	29	81	56	59	2103	2109	23.33	2115	2121
UNF 0001	Thermaldyne, LLC - Entire Facility	1	1	3	1		1		3	1	3			3	3	3
CON 0002	1-2015 - Thermal Oxidizer	1		1	3	3	2									
EQT 0001	1-2015(a) - TDU Describer Vent															
EQ1 0002	11-2018 - Wastewater Treatment Plant												2			
EQ1 0008	7-2015 - Descriper Heater			1	1	3	2									
EQ10011	6-2015 - Package Boiler No. 1			3	1	3	2									
EQTT80	7-2018 - Package Boiler No. 2			3	1	3	2									
EQT TBO	8-2018 - Package Boiler No. 3			3	1	3	2									
EQTTBD	9-2018 - Parkage Boiler No. 4			3	- 1	3	2									
EQT 180	10-2018 - Material Handling Building		1												2	
EQT TBD	10-2018(a) - Low Solids OBHSM Pit														2	
£Q1 180	10-2018(b)- Dewatering Unit	••••••													2	
EQT 18D	10-2018(c) - Solids Containment Area	•••••													2	
EQT TBD	10-2018(d) - Cleaning of Trucks & Boll-off Boxes														2	
EQT 180	12-2018 - Product Tank No. 1											3				
EQITBD	13-2018 - Product Tank No. 2	***************************************										3				
EQTTBD	14-2018 - Oll Tank No. 1											3				
EQTIBD	15-2018 - Water Tank No. 1											3				
EQTIBD	16-2018 - Water Tank No. 2 (from Centrifuge)											3				
EQTTBD	17-2018 - Ok Tank No. 2 (from Centrifuge)	***************************************										3				
EQT TBD	18-2018 - Blending Tank No. 1											3				
EQT TB0	19-2018 - Blending Tank No. 2											3				
EQT 180	20-2018 - Process Tank No. 1											3				
EQT TBO	21-2018 - Process Tank No. 2											3				
EQT TBO	22-7018 - Process Tank No. 3											3				
EQ1.180	23-2018 - Roll-off Boxes				1											
EQT TBO	24-2018 - YDU Solids Louding				1											
EQ1 180	25-2018 - Finished Catalyst Loading				1											
EQT 780	26-2018 - Catalyst Solids Loading				1											
EQT 780	27-2018 - Catalyst Screening				1											
EQTIBO	28-2018 - Processed Solids Discharge Conveyor				1											
EQTTBO	29-2018 - Emergency Diesel Generator			1	1	3	7	I	1		T					

### TABLE 1: APPLICABLE LOUISIANA AND FEDERAL AIR QUALITY REQUIREMENTS Thermaldyne, LLC - Port Allen Facility West Baton Rouge Parish, Louisiana

Source				40 C	FR 60			40 C	FR 61		40 CFR 63			40 CFR	
ID No.:	Descriptive Name of the Source	A	D	Db	Dc	Kb	1111	A	FF	A	VV	ZZZZ	64	68	92
UNF 0001	Thermaidyne, LLC - Entire Facility												3	3	3
CON 0002	1-2015 - Thermal Oxidizer		3	3	3										
EQT 6001	1-2015(a) - TOU Desorber Vent														
EQT 0002	11-2018 - Wastewater Treatment Plant														
EQT 0008	2-2015 - Desorber Heater		3	3	-3										
EQT 001.1	6-2015 - Package Boiler No. 1				3										
EQT TBD	7-2018 - Package Boiler No. 2				-3										
EQTTBD	8-2018 - Package Boiler No. 3				3										
EQTIBO	9-2018 - Package Boiler No. 4				3										
EQT TBD	10-2018 - Material Handling Building														
EQTTBD	10-2018(a) - Low Solids OBHSM Pit														
EQTTBD	10-2018(b): Dewatering Unit														
EQT TBD	10-2018(c) - Solids Containment Area														
EQT TBD	10-2018(d) - Cleaning of Trucks & Roll-off Boxes														
EQT TBD	12-2018 - Product Tank No. 1					š									
EQT TBD	13-2018 - Product Tank No. 2					3									
EQT TBD	14-2018 - Oil Tank No. 1					3									
EQT TBD	15-2018 - Water Tank No. 1					3									
EQT TBD	16-2018 - Water Tank No. 2 (from Centrifuge)					3									
EQT TBD	17-2018 - Oil Tank No. 2 (from Centrifuge)					3									
EQT TBD	18-2018 - Blending Tank No. 1					3		1							
EQT TBD	19-2018 - Blending Tank No. 2					3		i.							
EQT TBD	20-2018 - Process Tank No. 1					3									
EQT T8D	21-2018 - Process Tank No. 2					3									j
EQTIBD	22-2018 - Process Tank No. 3					3									
EQT 18D	23-2018 - Rall-off Bokes														
EQTIBD	24-2018 - TDU Solids Loading														
EQT TBD	25-2018 - Finished Catalyst Loading														
EQTTBD	26-2018 - Cetalyst Solids Loading														
EQTTBD	27-2018 - Catalyst Screening														
	28-2018 - Processed Solids Discharge Conveyor							19							
EQT TBD	29-2018 - Emergency Diesel Generator	1					i					1			

#### KEY:

- 1 The regulations have applicable requirements, which apply to this particular emission source may have an exemption from the control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 The regulations have applicable requirements, which may apply to this particular emissions source, but the source is currently exempt from these requirements due to meeting a specific criteria, such as it has been constructed, modified, or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.



## MAY = 6 2015 AIR PERMIT ROUTING/APPROVAL SLIP-Permits



AI No. 195964	Company Port Allen Land LLC	Date Received 3/25/2015
Activity No. PER20150001	Facility Port Allen Facility	Permit Type State Minor Mad
CDS No. 3120-00115	Permit No. 3120-00115-00	Expedited Permit Syes Ino

1. Technical Review		Api	proved	Date rec'd	Date FV	V		Comi	nents	
	БW	<i>D</i>		3/24/15	4/28/1	S .				
Air Quality / Modeling		3								
Toxics Technical Advisor		l n.	~~/		11201	16				
Supervisor Supervisor		× /	Ti =	2 94	विद्यार	70	as moted	<b></b>		
Other			<b>f</b>		112 11.7	2.1	**** (100 0000)	<b>~</b>		
2. Management Review (if	PN reg'd)	Apı	proved	Date rec'd	Date FV	V		Comn	nents	
Supervisor										
Manager				ļ						
Assistant Secretary (PN)  3. Response to Comments (if	DNI sonida		oroved	Date rec'd	Date FV	V		Comn		
Supervisor	in requi	Ap)	noveu	Date fee u	BARIC F V	•		Comm	icuis	
Manager			***************************************		***************************************		·····			
Administrator							9			1
Legal (BFD)										
4. Final Approval		Apı	proved	Date rec'd	Date FV	V		Comn	ients	
Supervisor Manager			······································							
Administrator		<b></b>	13NJ		77411 <i>{</i>			·····		9
Assistant Secretary		ì	<b>%</b> =		ЗWii	<hr/>			······································	e e
1. Technical Review					7111					
PN of App needed	☐ yes	🛛 no	Date of	PN of App			Newspape	r	0	10
Fee paid	🛛 yes	no								······································
NSPS applies	□ yes l	oa 🛛	PSD/N	NSR applies	☐ ye	s 🔀 no	NESHAP a	oplies	☐ yes	🛛 no
2. Post-Technical Review		•••••					***************************************			
Company technical review	[] yes	∑ no [	n/a	E-mail date			Remarks re	eived	☐ ye	s 🔲 no
Surveillance technical review	<b>⊠</b> yes	no l	n/a	E-mail date			Remarks re	eived	☐ yes	s 🔲 no
3. Public Notice				***************************************	***************************************					
Public Notice Required	☐yes [	⊠no								
Library			£							
PN newspaper 1/City	The Adv	ocate/	Baton Ro	ouge	PN Date			EDMS		☐ yes ☐ no
PN newspaper 2/City					PN Date			Verific	ation	yes no
Company notification letter sent	Date ma	niled								
EPA PN notification e-mail sent	Date e-i	nailed		ä						
OES PN mailout	Date		,	1						
4. Final Review			·	***************************************						
Public comments received	☐ yes l	□no	EPA co	omments rec'd	□ ye	s 🏻 no	Date EPA R mailed	esp. to t	Comme	nts-
Company comments received	☐ yes l	no	PN info Permit	entered into Sec VI	☐ ye	s 🔲 no	Date EPA a	pproved	permit	
Comments										

#### BOBBY JINDAL GOVERNOR



PEGGY M. HATCH SECRETARY

#### State of Louisiana

#### DEPARTMENT OF ENVIRONMENTAL QUALITY **ENVIRONMENTAL SERVICES**

Certified Mail No.: 7014 0510 0002 3394 7206

Activity No.: PER20150001 Agency Interest No.: 195964

Mr. Mike Yawn CEO, Port Allen Land LLC 2300 Trowbridge Rd Albany, GA 31707

RE:

Permit, Port Allen Land LLC, Port Allen Facility Port Allen, West Baton Rouge Parish, Louisiana

Dear Mr. Yawn:

This is to inform you that the permit request for the above referenced facility has been approved under LAC 33:III.501. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Also enclosed is a document entitled "General Information." Please be advised that this document contains a summary of facility-level information contained in LDEQ's TEMPO database and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may email your changes to facupdate@la.gov.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight, ten years from the issue date below, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

day of Y

Permit No.: 3120-00115-00
Sincerely,

Jewas Mudaway Tegan B. Treadaway Assistant Secretary

TBT:cew

Port Allen Land LLC
Agency Interest No.: 195964
Port Allen Land LLC
Port Allen, West Baton Rouge Parish, Louisiana

#### I. BACKGROUND

Port Allen Land LLC (PAL), Port Allen Facility, is proposing to build and operate an indirect fired Thermal Desorption Unit (TDU), which will be located on the west bank of the Mississippi River in Port Allen, West Baton Rouge Parish, Louisiana. The facility will process non- hazardous materials to recover and recycle valuable materials. These materials can include oil-bearing secondary wastes, sludges, and other oilfield and refinery materials.

#### II. ORIGIN

A permit application and Emissions Inventory Questionnaire (EIQ) dated March 25, 2015, were received requesting a permit. Additional information dated April 7, 21 and 27, 2015, was also received.

#### III. DESCRIPTION

Port Allen Land, LLC (PAL), is proposing to build and operate an indirect fired Thermal Desorption Unit (TDU), which will process a variety of petroleum and oil-bearing materials to recover and recycle useful hydrocarbon materials that would otherwise be disposed of in a landfill.

The petroleum materials will be fed to an indirect-fired, natural gas fueled TDU where the hydrocarbons will be liberated from the substrate materials by raising them beyond their boiling points to about 900 degrees Fahrenheit. Heavier materials such as any metals and inert materials will drop out of the dryer in solid form. The vent stream carrying the hydrocarbons will pass through a series of recovery equipment including a cyclone, hydroclone, and a venturi scrubber. Any remaining constituents of the vent stream will be processed through an acid gas scrubber and a thermal oxidizer. The clean effluent gas from the oxidizer will be routed back to the shell of the dryer for increased thermal efficiency. Water from the scrubber will be routed through the water treatment system where additional material recovery will occur. The materials recovered will include clean solid substrates and liquid hydrocarbons.

The thermal oxidizer will control the emissions from the desorber vent, oil water separator, and the storage tanks at the facility and is designed to operate with a better than 99.9% destruction efficiency, but for conservative reasons, the efficiency will be set at 99%. Emissions of residual hydrocarbons will be very small.

The majority of the hydrocarbons that are present in the feed materials will be recovered in the process. The small amounts of lighter hydrocarbons that cannot be recovered are controlled in

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

the thermal oxidizer. Additionally, there is a vent stream containing recovered hydrocarbons that is routed to the recovery equipment and then to the control equipment. After passing through the oxidizer, this hot vent stream will be passed through the shell of the desorber to increase desorber energy efficiency.

The process water will be sent through an oil separator to recover additional hydrocarbon materials. These materials will be added to the recovered oil for re-sale.

Recovered hydrocarbons and in-process waste water will be stored in tanks. The hydrocarbons will be sold offsite and the water will be treated and returned to the process.

The TDU will operate at 40 MMBTU per hour. The triple shell indirect-fired rotary desorber will heat the materials being fed without direct contact. The desorber is fired by natural gas.

Recovered hydrocarbons will be equivalent to lube oil in physical characteristics. This material will be loaded into tank trucks periodically for sale to other users.

The baghouse controls any particulate emissions that originate from the solids cooling and controlling auger. It will be used to remove the majority of any particulates that are generated during the solids recovery process.

A package boiler will be utilized to generate steam for use in heating the heavier sludge materials to increase the ability to move these through the process.

Non-specified area sources can generate fugitive emissions from equipment that is in potential VOC service. These emissions are very small. Other emissions are from insignificant activities.

There are no other facilities owned by PAL and contiguous with the TDU facility.

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

Estimated emissions from this facility in tons per year are as follows:

Pollutant	Emissions (TPY)	
PM <sub>10</sub>	4.57	
$PM_{2.5}$	4.57	
$SO_2$	0.14	
$NO_X$	11.81	
CO	18.03	
VOC	12.25	

LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs)\*:

Pollutant		Emissions (TPY)	_	
Benzene		0.41	,	
1,2,4-Trichlorobenzene		0.02		
Total	·	*		

#### IV. TYPE OF REVIEW

This permit was reviewed for compliance with Louisiana Air Quality Regulations. New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD)/Non-attainment New Source Review (NNSR) do not apply.

\*This proposed facility will be a minor source of LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs). The Port Allen Facility is being permitted to service a wide variety of non-hazardous materials that can contain very different chemical components. The facility will be receiving some materials that can contain some Toxic Air Pollutants (TAPs). Emissions of any TAP not listed above shall be limited to less than the MER for that TAP as listed in Table 51.1, 51.2 of LAC 33:III.5112. Additionally, for flexibility purposes, TAP emissions from the facility shall not exceed 8 TPY of a single TAP or 20 TPY of aggregate TAPs.

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

#### V. PUBLIC NOTICE

Public notice is not required to permit a minor source.

#### VI. EFFECTS ON AMBIENT AIR

Emissions associated with the proposed facility were reviewed by LDEQ to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

#### VII. GENERAL CONDITION XVII ACTIVITIES

			Emiss	ion Rates	- tons	
Work Activity	Schedule	$PM_{10}$	$SO_2$	$NO_X$	CO	VOC
Tank Cleaning	Semi-annually			8		<5 tpy

#### VIII. INSIGNIFICANT ACTIVITIES

ID No.: Description	Citation
None	LAC 33:III.501.B.5

#### **General Information**

Al ID: 195964 Port Allen Land LLC Activity Number: PER20150001 Permit Number: 3120-00115-00 Air - Minor Source/Small Source Initial

Alen	Known	Ac.
MIDU	MIIOMII	MJ.

ID	Name	User Group	Start Date
3120-00115	CDS#	CDS Number	03-25-2015
		R	

Physical Location:

1244 Com Maize Rd Port Allen, LA 70767

Mailing Address:

2300 Trowbridge Rd Albany, GA 31707

Port Allen Land LLC

Name

Location of Front Gate:

**Related Organizations:** 

30.490639 latitude, -91.218336 longitude, Coordinate Method: Lat.\Long. - DMS, Coordinate Datum: NAD83 **Mailing Address** 

Related People:

Mike Yawn	2300 Trowbridge Rd Albany, LA 31707	2293441981 (WP)	Responsible Official for
Name	Address	Phone (Type)	Relationship
Port Allen Land LLC Port Allen Land LLC	2300 Trowbridge Rd Albany, GA 31707 2300 Trowbridge Rd Albany, GA 31707	·	Owns Air Billing Party for

Phone (Type)

Relationship

Operates

**NAIC Codes:** 

562219, Other Nonhazardous Waste Treatment and Disposal

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may email your changes to facupdate@la.gov.

2300 Trowbridge Rd Albany, GA 31707

#### **INVENTORIES**

Al ID: 195964 - Port Allen Land LLC Activity Number: PER20150001 Permit Number: 3120-00115-00 Air - Minor Source/Small Source Initial

#### Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
			<u></u> _			
Entire Faci	lity-Port Allen Land, LLC					×
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack					8760 hr/yr
CON 0002	1-2015 - TDU Oxidizer Vent	i i	6 MM BTU/hr	5 MM BTU/hr		8760 hr/yr
EQT 0001	1-2015(a) - TDU Desorber Vent					8760 hr/yr
EQT 0002	1-2015 (b) - Oll/Water Separator					8760 hr/yr
EQT 0003	1-2015 (ca) - TK-1					8760 hr/yr
EQT 0004	1-2015 (cb) - TK-2					8760 hr/yr
EQT 0005	1-2015 (cc) - TK-3					8760 hr/yr
<b>EQT 0006</b>	1-2015(cd) - TK-4				(A) 2 (A) (26)	8760 hr/yr
EQT 0007	1-2015 (ce) - TK-5					8760 hr/yr
EQT 0008	2-2015 - Desorber Heater	1	48 MM BTU/hr	40 MM BTU/hr		8760 hr/yr
EQT 0009	4-2015 - Loading Emissions			5 MM gallons/yr	lube oil equivalent	2920 hr/yr
EQT 0010	5-2015 - Baghouse		1952 SCFM	1952 SCFM	Solid fines	8760 hr/yr
EQT 0011	6-2015 - Package Boiler		5 MM BTU/hr	5 MM BTU/hr		8760 hr/yr
FUG 0001	3-2015 - Fugitive Emissions					8760 hr/yr

#### Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
Entire Facility-Port Allen	Land, LLC	***					
CON 0001 CSTK-1 - TDL	J Oxidizer/Desorber Common Stack	1.4	8000	11	7	40	1500
EQT 0009 4-2015 - Load	ing Emissions				· · · · · · · · · · · · · · · · · · ·		150
EQT 0010 5-2015 - Bagh	ouse	60	2000	.5		35	70
EQT 0011 6-2015 - Pack	age Boiler	10	900	1.4		30	400

#### Relationships:

Relationships	?e.			
ID	Description	Relationship	ID	Description
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack	Controls emissions from	EQT 0008	2-2015 - Desorber Heater
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack	Controls emissions from	CON 0002	1-2015 - TDU Oxidizer Vent
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0001	1-2015(a) - TDU Desorber Vent
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0006	1-2015(cd) - TK-4
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0007	1-2015 (ce) - TK-5
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0002	1-2015 (b) - Oll/Water Separator
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0004	1-2015 (cb) - TK-2
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0003	1-2015 (ca) - TK-1
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0005	1-2015 (cc) - TK-3

Page 1 of 2

#### **INVENTORIES**

Al ID: 195964 - Port Allen Land LLC Activity Number: PER20150001 Permit Number: 3120-00115-00 Air - Minor Source/Small Source Initial

#### Subject Item Groups:

ID	Group Type	Group Description	
UNF 0001	Unit or Facility Wide	PAL LLC - Entire Facility-Port Allen Land, LLC	

#### Group Membership:

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

#### Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multiplier	Units Of Measure
1722	1722 Small Source Permit		The contract of the contract o

#### SIC Codes:

	<del>-</del>	
4953	Define austama	Al 195964
4900	Refuse systems	AI 190904

#### **EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

	PM10			PM2.5			SO2			NOx	· · · · · · · · · · · · · · · · · · ·	
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max Ib/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
Entire Facility-Port	Allen Land, LLC											
CON 0001 CSTK-1	0.335	0.402	1.47	0.335	0.402	1.47	0.026	0.032	0.12	2.206	2.647	9.66
EQT 0009 4-2015												
EQT 0010 5-2015	0.670	0.700	2.93	0.670	0.700	2.93 .						
EQT 0011 6-2015	0.040	0.040	0.17	0.040	0.040	0.17	0.003	0.003	0.02	0.490	0.490	2.15
FUG 0001 3-2015												

#### **EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

	CO		· · · · · · · · · · · · · · · · · · ·	VOC		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
Entire Facility-Port	Allen Land, LL	3				
CON 0001 cstk-1	3.706	4.447	16.23	2.123	2.171	9.30
EQT 0009 4-2015				0.035	0.042	0.05
EQT 0010 5-2015			[			
EQT 0011 6-2015	0.412	0.412	1.80	0.027	0.027	0.12
FUG 0001 3-2015			: :	0.566	0.566	2.48

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

#### **EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
CON 0001 CSTK-1	1,2,4-Trichlorobenzene	0.005	0.006	0.02
	Benzene	0.094	0.113	0.41
UNF 0001 PAL LLC	1,2,4,5-Tetrachlorobenzene			0.02
	Benzene		•:	0.41

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

#### CON 0002 1-2015 - TDU Oxidizer Vent

1 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average
2 [LAC 33:III.501.C.6]	Temperature >= 1600 F 870 degrees C) for 0.5 seconds or greater in a thermal incinerator, with a 98 percent or greater VOC destruction or
	removal efficiency.

Which Months: All Year Statistical Basis: None specified

#### EQT 0008 2-2015 - Desorber Heater

3 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average
4 [LAC 33:III.1313.C]	Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: None specified

#### EQT 0010 5-2015 - Baghouse

5	[LAC 33:III.501.C.6]	Baghouses (including gaskets): Equipment/operational data monitored by technically sound method semiannually or whenever a visible
		emissions check indicates maintenance may be necessary. Change elements as necessary.
		Which Months: All Year Statistical Basis: None specified
6	[LAC 33:III.501.C.6]	Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of
		inspections and maintenance activities on site for a period of at least five years and available for inspection by the Office of Environmental
		Compliance.
7	[LAC 33:III.501.C.6]	Once the baghouse is selected, the particulate matter removal efficiency from the manufacturer's certification shall be included as a modification
		to the permit.
8	[LAC 33:III.501.C.6]	Particulate matter (10 microns or less) (PM10) <= 0.040 gr/dscf.
		Which Months: All Year Statistical Basis: None specified

#### EQT 0011 6-2015 - Package Boiler

9 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average

#### UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

#### UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

9141	VOVI TALLES LIMICTA	omy totalion with a made
10	[LAC 33:III.1103]	Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.
11	[LAC 33:HI.1109.B]	Outdoor burning of waste material or other combustible material is prohibited.
12	[LAC 33:III.1303.B]	Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
13	[LAC 33:III.2113.A]	Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping includes, but is not limited to, the practices listed in LAC 33:III.2113.A.1 through A.5.
14	[LAC 33:HI.219]	Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
15	[LAC 33:III.2901.D]	Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
16	[LAC 33:III.2901.F]	If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in 33:III.2901.G.
17	[LAC 33:III.501.C.6]	Toxic air pollutants (TAP) <= 20 tons/yr for aggregate TAPs. Non-compliance with this limit is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division, if the facility-wide emissions of aggregate TAP s exceed the maximum listed in this specific condition.
18	[LAC 33:III.501:C.6]	Which Months: Phases: Statistical Basis: Twelve-month rolling average (rolling 1-month basis)  Use of any material containing a Louisiana Toxic Air Pollutant (TAP) listed in Table 51.1, 51.2, or 51.3 of LAC 33:III.Chapter 51 is permitted. Emissions of any TAP for which this permit lists a facility-wide emission limitation shall be limited to the amount stated. Emissions of any TAP for which this permit does not list a facility-wide emission limitation shall be limited to an amount less than the Minimum Emission Rate (MER) for that TAP as listed in Tables 51.1 and 51.2 of LLAC 33:III.5112. Emissions of any TAP not listed in the Emission Rates for TAP/HAP and Other Pollutants section of this permit in an amount greater than or equal to the MER shall require a permit modification prior to use. Permittee may emit any TAP listed in Table 51.3 of LAC 33:III.5112 at any rate so long as the facility-wide total emission of TAP remains below the amount shown in this specific condition. Non-compliance with this limit is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division, if the facility-wide emissions of TAP exceed the maximum listed in this specific condition for any twelve consectuive month period.
19	[LAC 33:III.537]	Comply with the Louisiana General Conditions as set forth in LAC 33:III.537.
20	-	Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by DEQ.
21	[LAC 33:III.5611.B]	During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by DEQ to enforce these regulations.

Page 2 of 3 TPOR0147

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

#### UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

22 [LAC 33:III.919]

Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, unless otherwise directed by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1.c, separately for each AI, in a format specified by DEQ. Include the information specified in LAC 33:III.919.F.1.a through F.1.d.

#### **Cathy Thompson Wilson**

From:

Charles Brumfield <charles.brumfield@eaglered.com>

Sent:

Monday, May 04, 2015 8:43 AM

To:

Cathy Thompson Wilson

Subject:

RE: AI 195964 PER20150001

Cathy,

I do not need to review the draft of the permit. Please route for final signature. Thank you.

#### Charles "Beaux" Brumfield

Sr. Air Project Lead Eagle Environmental 18369 Petroleum Drive Baton Rouge, LA 70809

Office: 225.757.0870 Fax: 225.757.8855 Mobile: 225.205.7096

Charles.Brumfield@eaglered.com



From: Cathy Thompson Wilson [mailto:Cathy.Thompson@LA.GOV]

Sent: Monday, April 27, 2015 2:41 PM

To: Charles Brumfield

Subject: RE:-AI-195964 PER20150001\_\_\_\_

I made the changes, but I'll look over everything again tonight and it will go into routing in the morning. Thanks and take care.

From: Charles Brumfield [mailto:charles.brumfield@eaglered.com]

Sent: Monday, April 27, 2015 2:29 PM

To: Cathy Thompson Wilson

Subject: RE: AI 195964 PER20150001

Cathy,

We lost power all morning and just got it back a little while ago. Here are the changes. Let me know if you have any questions.

#### Charles "Beaux" Brumfield

Sr. Air Project Lead Eagle Environmental 18369 Petroleum Drive Baton Rouge, LA 70809

Office: 225.757.0870 Fax: 225.757.8855 Mobile: 225.205.7096

#### Charles.Brumfield@eaglered.com



From: Cathy Thompson Wilson [mailto:Cathy.Thompson@LA.GOV]

Sent: Monday, April 27, 2015 2:07 PM

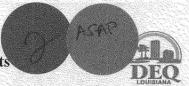
To: Charles Brumfield

Subject: Al 195964 PER20150001

Not sure about the weather there, I know a lot of power outages are being reported. Just reminding you to email me the changes we talked about this morning concerning the loading hours and throughput. Take care and thanks.



## MAY = 6 2015 AIR PERMIT ROUTING/APPROVAL SLIP-Permits



AI No.	195964	Company	Port Allen Land LLC	Date Received	3/25/2015
Activity No.	PER20150001	Facility	Port Allen Facility	Permit Type	StateMinorMad
CDS No.	3120-00115	Permit No.	3120-00115-00	<b>Expedited Permit</b>	⊠yes □no

1. Technical Review		Approved	Date rec'd	Date FW			Comm	ents	
Permit Writer C5	W	CEW	3/26/15	4/28/15					
Air Quality / Modeling								× 11.	
Toxics				11-11-					
Technical Advisor		Dan		4/20/13	-				
Supervisor Other		<u> </u>		4/29/15	orci	as morted	<u> </u>		
	v req'd)	Approved	Date rec'd	Date FW			Comm	onta	
Supervisor	( req u)	Approved	Date rec u	Datery			COMIN	ienis	
Manager									
Assistant Secretary (PN)									
3. Response to Comments (if P)	V req'd)	Approved	Date rec'd	Date FW			Comm	ents	
Supervisor									
Manager	1000								
Administrator									
Legal (BFD)									
4. Final Approval Supervisor		Approved	Date rec'd	Date FW	5682700		Comm	ents	
Manager		7		7					
Administrator		13N		714/1C					
Assistant Secretary		TRIT		SHITE					
1. Technical Review				9 1113					10.0
PN of App needed	☐ yes ▷	no Date of	PN of App			Newspaper			
Fee paid	yes [								
NSPS applies	yes 🖸		VSR applies	☐ yes 🏿	d no	NESHAP at	pplies	☐ yes	⊠ no
2. Post-Technical Review									
Company technical review	☐ yes 🏻	] no 🗌 n/a	E-mail date			Remarks red	eived	☐ yes	no
Surveillance technical review	🛚 yes [	] no [] n/a	E-mail date			Remarks red	eived	☐ yes	По
3. Public Notice									
Public Notice Required	□yes 🗵	no							
Library									Section 2
PN newspaper 1/City	The Advo	ocate/Baton Ro	uge	PN Date			EDMS		☐ yes ☐ no
PN newspaper 2/City				PN Date			Verifica	ation	yes no
Company notification letter sent	Date mai	led							
EPA PN notification e-mail sent	Date e-m	ailed							
OES PN mailout	Date								
4. Final Review									
Public comments received	☐ yes ☐	no EPA co	mments rec'd	yes [	] no	Date EPA R mailed	esp. to C	Commei	1ts-
Company comments received	☐ yes ☐	no PN info	entered into Sec VI	yes [	] no	Date EPA a	pproved	permit	
Comments									

#### BOBBY JINDAL GOVERNOR



PEGGY M. HATCH SECRETARY

#### State of Louisiana

#### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

Certified Mail No.: 7014 0510 0002 3394 7206

Activity No.: PER20150001 Agency Interest No.: 195964

Mr. Mike Yawn CEO, Port Allen Land LLC 2300 Trowbridge Rd Albany, GA 31707

RE:

Permit, Port Allen Land LLC, Port Allen Facility Port Allen, West Baton Rouge Parish, Louisiana

Dear Mr. Yawn:

This is to inform you that the permit request for the above referenced facility has been approved under LAC 33:III.501. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets, and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Also enclosed is a document entitled "General Information." Please be advised that this document contains a summary of facility-level information contained in LDEQ's TEMPO database and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may email your changes to facupdate@la.gov.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight, ten years from the issue date below, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and agency interest number cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

The permit number cited below and agency interest number cited above should be referenced in future correspondence regarding this facility.

Permit No.: 3120-00115-00

Sincerely,

Tegan B Territory Tegan B. Treadaway Assistant Secretary

TBT:cew

Port Allen Land LLC
Agency Interest No.: 195964
Port Allen Land LLC
Port Allen, West Baton Rouge Parish, Louisiana

#### I. BACKGROUND

Port Allen Land LLC (PAL), Port Allen Facility, is proposing to build and operate an indirect fired Thermal Desorption Unit (TDU), which will be located on the west bank of the Mississippi River in Port Allen, West Baton Rouge Parish, Louisiana. The facility will process non- hazardous materials to recover and recycle valuable materials. These materials can include oil-bearing secondary wastes, sludges, and other oilfield and refinery materials.

#### II. ORIGIN

A permit application and Emissions Inventory Questionnaire (EIQ) dated March 25, 2015, were received requesting a permit. Additional information dated April 7, 21 and 27, 2015, was also received.

#### III. DESCRIPTION

Port Allen Land, LLC (PAL), is proposing to build and operate an indirect fired Thermal Desorption Unit (TDU), which will process a variety of petroleum and oil-bearing materials to recover and recycle useful hydrocarbon materials that would otherwise be disposed of in a landfill.

The petroleum materials will be fed to an indirect-fired, natural gas fueled TDU where the hydrocarbons will be liberated from the substrate materials by raising them beyond their boiling points to about 900 degrees Fahrenheit. Heavier materials such as any metals and inert materials will drop out of the dryer in solid form. The vent stream carrying the hydrocarbons will pass through a series of recovery equipment including a cyclone, hydroclone, and a venturi scrubber. Any remaining constituents of the vent stream will be processed through an acid gas scrubber and a thermal oxidizer. The clean effluent gas from the oxidizer will be routed back to the shell of the dryer for increased thermal efficiency. Water from the scrubber will be routed through the water treatment system where additional material recovery will occur. The materials recovered will include clean solid substrates and liquid hydrocarbons.

The thermal oxidizer will control the emissions from the desorber vent, oil water separator, and the storage tanks at the facility and is designed to operate with a better than 99.9% destruction efficiency, but for conservative reasons, the efficiency will be set at 99%. Emissions of residual hydrocarbons will be very small.

The majority of the hydrocarbons that are present in the feed materials will be recovered in the process. The small amounts of lighter hydrocarbons that cannot be recovered are controlled in

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

the thermal oxidizer. Additionally, there is a vent stream containing recovered hydrocarbons that is routed to the recovery equipment and then to the control equipment. After passing through the oxidizer, this hot vent stream will be passed through the shell of the desorber to increase desorber energy efficiency.

The process water will be sent through an oil separator to recover additional hydrocarbon materials. These materials will be added to the recovered oil for re-sale.

Recovered hydrocarbons and in-process waste water will be stored in tanks. The hydrocarbons will be sold offsite and the water will be treated and returned to the process.

The TDU will operate at 40 MMBTU per hour. The triple shell indirect-fired rotary desorber will heat the materials being fed without direct contact. The desorber is fired by natural gas.

Recovered hydrocarbons will be equivalent to lube oil in physical characteristics. This material will be loaded into tank trucks periodically for sale to other users.

The baghouse controls any particulate emissions that originate from the solids cooling and controlling auger. It will be used to remove the majority of any particulates that are generated during the solids recovery process.

A package boiler will be utilized to generate steam for use in heating the heavier sludge materials to increase the ability to move these through the process.

Non-specified area sources can generate fugitive emissions from equipment that is in potential VOC service. These emissions are very small. Other emissions are from insignificant activities.

There are no other facilities owned by PAL and contiguous with the TDU facility.

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

Estimated emissions from this facility in tons per year are as follows:

Pollutant	Emissions (TPY)	
PM <sub>10</sub>	4.57	
$PM_{2.5}$	4.57	
$SO_2$	0.14	
$NO_X$	11.81	
CO	18.03	
VOC	12.25	

LAC 33:III	Chapter 51	Toxic	Air Polluta	nts (TAPs)*:

Pollutant	Emissions (TPY)				
Benzene	0.41				
1,2,4-Trichlorobenzene	0.02				
Total	. *				

#### IV. TYPE OF REVIEW

This permit was reviewed for compliance with Louisiana Air Quality Regulations. New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP). Prevention of Significant Deterioration (PSD)/Non-attainment New Source Review (NNSR) do not apply.

\*This proposed facility will be a minor source of LAC 33:III.Chapter 51 Toxic Air Pollutants (TAPs). The Port Allen Facility is being permitted to service a wide variety of non-hazardous materials that can contain very different chemical components. The facility will be receiving some materials that can contain some Toxic Air Pollutants (TAPs). Emissions of any TAP not listed above shall be limited to less than the MER for that TAP as listed in Table 51.1, 51.2 of LAC 33:III.5112. Additionally, for flexibility purposes, TAP emissions from the facility shall not exceed 8 TPY of a single TAP or 20 TPY of aggregate TAPs.

# Port Allen Land LLC Agency Interest No.: 195964 Port Allen Land LLC Port Allen, West Baton Rouge Parish, Louisiana

#### V. PUBLIC NOTICE

Public notice is not required to permit a minor source.

#### VI. EFFECTS ON AMBIENT AIR

Emissions associated with the proposed facility were reviewed by LDEQ to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

#### VII. GENERAL CONDITION XVII ACTIVITIES

			Emiss	ion Rates	- tons	
Work Activity	Schedule	$PM_{10}$	$SO_2$	$NO_X$	CO	VOC
Tank Cleaning	Semi-annually					<5 tpy

#### VIII. INSIGNIFICANT ACTIVITIES

ID No.: Description	Citation
None	LAC 33:III.501.B.5

#### **General Information**

Al ID: 195964 Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

Also Known As:	ID Name			User Group	Start Date	
	3120-00115	CDS#	Ī	CDS Number	03-25-2015	
Physical Location:	1244 Corn Maize Rd Port Allen, LA 70767					
Mailing Address:	2300 Trowbridge Rd Albany, GA 31707			*		
Location of Front Gate:	30.490639 latitude, -9	1.218336 longitude, Coordinate Method: La	at.\Long DMS, Coordinate D	atum: NAD83		
Related People:	Name	Mailing Address		Phone (Type)	Relationship	
	Mike Yawn	2300 Trowbridge Rd	Albany, LA 31707	2293441981 (WP)	Responsible Official for	
Related Organizations:	Name	Address	l	Phone (Type)	Relationship	9
	Port Allen Land LLC	2300 Trowbridge Rd	Albany, GA 31707		Owns	
	Port Allen Land LLC	2300 Trowbridge Rd	Albany, GA 31707		Air Billing Party for	
	Port Allen Land LLC	2300 Trowbridge Rd	Albany, GA 31707	4	Operates	
NAIC Codes:	562219. Other Nonhaz	ardous Waste Treatment and Disposal				

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may email your changes to facupdate@la.gov.

#### **INVENTORIES**

Al ID: 195964 - Port Allen Land LLC Activity Number: PER20150001 Permit Number: 3120-00115-00 Air - Minor Source/Small Source Initial

#### Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Entire Fac	ility-Port Allen Land, LLC					<u> </u>
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack	<u>i</u>			T	8760 hr/yr
	1-2015 - TDU Oxidizer Vent		6 MM BTU/hr	5 MM BTU/hr		8760 hr/yr
<b>EQT 0001</b>	1-2015(a) - TDU Desorber Vent					8760 hr/yr
EQT 0002	1-2015 (b) - Oll/Water Separator		<u> </u>			8760 hr/yr
<b>EQT 0003</b>	1-2015 (ca) - TK-1					8760 hr/yr
<b>EQT 0004</b>	1-2015 (cb) - TK-2	1	i			8760 hr/yr
<b>EQT 0005</b>	1-2015 (cc) - TK-3	<b>∌</b> 1				8760 hr/yr
<b>EQT 0006</b>	1-2015(cd) - TK-4	1		B 8		8760 hr/yr
EQT 0007	1-2015 (ce) - TK-5					8760 hr/yr
<b>EQT 0008</b>	2-2015 - Desorber Heater	ı	48 MM BTU/hr	40 MM BTU/hr		8760 hr/yr
EQT 0009	4-2015 - Loading Emissions			5 MM gallons/yr	lube oil equivalent	2920 hr/yr
<b>EQT 0010</b>	5-2015 - Baghouse		1952 SCFM	1952 SCFM	Solid fines	8760 hr/yr
EQT 0011	6-2015 - Package Boiler		5 MM BTU/hr	5 MM BTU/hr		8760 hr/yr
FUG 0001	3-2015 - Fugitive Emissions					8760 hr/yr

#### Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (oF)
Entire Facility-Port Allen	Land, LLC	tor			·		
CON 0001 CSTK-1 - TDU	J Oxidizer/Desorber Common Stack	1.4	8000	11		40	1500
EQT 0009 4-2015 - Load	ing Emissions						150
EQT 0010 5-2015 - Bagh	ouse	60	2000	.5		35	70
EQT 0011 6-2015 - Pack	age Boiler	10	900	1.4	,	30	400

#### Relationships:

ID	Description	Relationship	ID	Description
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack	Controls emissions from	EQT 0008	2-2015 - Desorber Heater
CON 0001	CSTK-1 - TDU Oxidizer/Desorber Common Stack	Controls emissions from	CON 0002	1-2015 - TDU Oxidizer Vent
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0001	1-2015(a) - TDU Desorber Vent
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0006	1-2015(cd) - TK-4
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0007	1-2015 (ce) - TK-5
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0002	1-2015 (b) - Oll/Water Separator
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0004	1-2015 (cb) - TK-2
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0003	1-2015 (ca) - TK-1
CON 0002	1-2015 - TDU Oxidizer Vent	Controls emissions from	EQT 0005	1-2015 (cc) - TK-3

Page 1 of 2

#### **INVENTORIES**

Al ID: 195964 - Port Allen Land LLC Activity Number: PER20150001 Permit Number: 3120-00115-00 Air - Minor Source/Small Source Initial

#### Subject Item Groups:

ID	Group Type	Group Description
UNF 0001	Unit or Facility Wide	PAL LLC - Entire Facility-Port Allen Land, LLC

#### Group Membership:

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

#### Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multiplier	Units Of Measure	
1722	1722 Small Source Permit			

#### SIC Codes:

4953	Refuse systems	 Al 195964

#### **EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

	PM10			PM2.5	1		SO2			NOx		
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max Ib/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg ib/hr	Max lb/hr	Tons/Year
Entire Facility-Port	Allen Land, LLC	Ç		-	) 200 							
CON 0001 CSTK-1	0.335	0.402	1.47	0.335	0.402	1.47	0.026	0.032	0.12	2.206	2.647	9.66
EQT 0009 4-2015							, -					
EQT 0010 5-2015	0.670	0.700	2.93	0.670	0.700	2.93						
EQT 0011 6-2015	0.040	0.040	0.17	0.040	0.040	0.17	0.003	0.003	0.02	0.490	0.490	2.15
FUG 0001 3-2015												

#### **EMISSION RATES FOR CRITERIA POLLUTANTS AND CO2e**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

	CO			VOC		<del> </del>
Subject Item	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
Entire Facility-Port	Allen Land, LL	Ç				
CON 0001 cstk-1	3.706	4.447	16.23	2.123	2.171	9.30
EQT 0009 4-2015				0.035	0.042	0.05
EQT 0010 5-2015	7 0 0 00					
EQT 0011 6-2015	0.412	0.412	1.80	0.027	0.027	0.12
FUG 0001 3-2015				0.566	0.566	2.48

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

#### **EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS**

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
CON 0001 CSTK-1	1,2,4-Trichlorobenzene	0.005	0.006	0.02
	Benzene	0.094	0.113	0.41
JNF 0001 PAL LLC	1,2,4,5-Tetrachlorobenzene			0.02
	Benzene		,	0.41

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

#### CON 0002 1-2015 - TDU Oxidizer Vent

1 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average
2 [LAC 33:III.501.C.6]	Temperature >= 1600 F 870 degrees C) for 0.5 seconds or greater in a thermal incinerator, with a 98 percent or greater VOC destruction or
	removal efficiency.
	Which Months: All Year Statistical Basis: None specified

#### EQT 0008 2-2015 - Desorber Heater

3 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
•	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average
4 [LAC 33:III.1313.C]	Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
*	Which Months: All Year Statistical Basis: None specified

#### EQT 0010 5-2015 - Baghouse

5	[LAC 33:III.501.C.6]	Baghouses (including gaskets): Equipment/operational data monitored by technically sound method semiannually or whenever a visible emissions check indicates maintenance may be necessary. Change elements as necessary.
		Which Months: All Year Statistical Basis: None specified
6	[LAC 33:III.501.C.6]	Baghouses: Equipment/operational data recordkeeping by electronic or hard copy upon each occurrence of inspection. Keep records of
		inspections and maintenance activities on site for a period of at least five years and available for inspection by the Office of Environmental
		Compliance.
7	[LAC 33:III.501.C.6]	Once the baghouse is selected, the particulate matter removal efficiency from the manufacturer's certification shall be included as a modification
		to the permit.
8	[LAC 33:III.501.C.6]	Particulate matter (10 microns or less) (PM10) <= 0.040 gr/dscf.
		Which Months: All Year Statistical Basis: None specified

#### EQT 0011 6-2015 - Package Boiler

9 [LAC 33:III.1311.C]	Opacity <= 20 percent, except for emissions that have an average opacity in excess of 20 percent for not more than one six-minute period in any
	60 consecutive minutes. (Complies by using sweet natural gas as fuel).
	Which Months: All Year Statistical Basis: Six-minute average

#### UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

# SPECIFIC REQUIREMENTS

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

## UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

0.11	OOO! TALLES - Elitile Fu	inty i of Allon Editor, ELO
10	[LAC 33:III,1103]	Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensifies an existing traffic hazard condition are prohibited.
11	[LAC 33:HI.1109.B]	Outdoor burning of waste material or other combustible material is prohibited.
12	[LAC 33:III.1303.B]	Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
13	[LAC 33:III.2113.A]	Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping includes, but is not limited to, the practices listed in LAC 33:III.2113.A.1 through A.5.
14	[LAC 33:HI.219]	Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
15	[LAC 33:III.2901.D]	Discharges of odorous substances at or beyond property lines which cause a perceived odor intensity of six or greater on the specified eight point butanol scale as determined by Method 41 of LAC 33:III.2901.G are prohibited.
16	[LAC 33:III.2901.F]	If requested to monitor for odor intensity, take and transport samples in a manner which minimizes alteration of the samples either by contamination or loss of material. Evaluate all samples as soon after collection as possible in accordance with the procedures set forth in 33:III.2901.G.
17	[LAC 33:III.501.C.6]	Toxic air pollutants (TAP) <= 20 tons/yr for aggregate TAPs. Non-compliance with this limit is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division, if the facility-wide emissions of aggregate TAPs exceed the maximum listed in this specific condition.
18	[LAC 33:III.501.C.6]	Which Months: Phases: Statistical Basis: Twelve-month rolling average (rolling 1-month basis)  Use of any material containing a Louisiana Toxic Air Pollutant (TAP) listed in Table 51.1, 51.2, or 51.3 of LAC 33:III.Chapter 51 is permitted. Emissions of any TAP for which this permit lists a facility-wide emission limitation shall be limited to the amount stated. Emissions of any TAP for which this permit does not list a facility-wide emission limitation shall be limited to an amount less than the Minimum Emission Rate (MER) for that TAP as listed in Tables 51.1 and 51.2 of LLAC 33:III.5112. Emissions of any TAP not listed in the Emission Rates for TAP/HAP and Other Pollutants section of this permit in an amount greater than or equal to the MER shall require a permit modification prior to use. Permittee may emit any TAP listed in Table 51.3 of LAC 33:III.5112 at any rate so long as the facility-wide total emission of TAP remains below the amount shown in this specific condition. Non-compliance with this limit is a reportable violation of the permit. Notify the Office of Environmental Compliance, Enforcement Division, if the facility-wide emissions of TAP exceed the maximum listed in this specific condition for any twelve consectuive month period.
19	[LAC 33:III.537]	Comply with the Louisiana General Conditions as set forth in LAC 33:III.537.
20	[LAC 33:111.5611.A]	Submit standby plan for the reduction or elimination of emissions during an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency: Due within 30 days after requested by DEQ.
21	[LAC 33:III.5611.B]	During an Air Pollution Alert, Air Pollution Warning or Air Pollution Emergency, make the standby plan available on the premises to any person authorized by DEQ to enforce these regulations.

TPOR0147

# SPECIFIC REQUIREMENTS

Al ID: 195964 - Port Allen Land LLC
Activity Number: PER20150001
Permit Number: 3120-00115-00
Air - Minor Source/Small Source Initial

### UNF 0001 PAL LLC - Entire Facility-Port Allen Land, LLC

22 [LAC 33:III.919]

Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 30th of April to the Office of Environmental Services, for the reporting period of the previous calendar year that coincides with period of ownership or operatorship, unless otherwise directed by DEQ. Submit both an emissions inventory and the certification statement required by LAC 33:III.919.F.1.c, separately for each AI, in a format specified by DEQ. Include the information specified in LAC 33:III.919.F.1.a through F.1.d.

**TPOR0147** 

# **Cathy Thompson Wilson**

From:

Charles Brumfield <charles.brumfield@eaglered.com>

Sent:

Monday, May 04, 2015 8:43 AM

To:

Cathy Thompson Wilson

Subject:

RE: AI 195964 PER20150001

Cathy,

I do not need to review the draft of the permit. Please route for final signature. Thank you.

# Charles "Beaux" Brumfield

Sr. Air Project Lead Eagle Environmental 18369 Petroleum Drive Baton Rouge, LA 70809

Office: 225.757.0870 Fax: 225.757.8855 Mobile: 225.205.7096

Charles.Brumfield@eaglered.com



From: Cathy Thompson Wilson [mailto:Cathy.Thompson@LA.GOV]

Sent: Monday, April 27, 2015 2:41 PM

To: Charles Brumfield

Subject: RE: Al-195964 PER20150001----

I made the changes, but I'll look over everything again tonight and it will go into routing in the morning. Thanks and take care.

From: Charles Brumfield [mailto:charles.brumfield@eaglered.com]

Sent: Monday, April 27, 2015 2:29 PM

To: Cathy Thompson Wilson

Subject: RE: AI 195964 PER20150001

Cathy,

We lost power all morning and just got it back a little while ago. Here are the changes. Let me know if you have any questions.

# Charles "Beaux" Brumfield

Sr. Air Project Lead Eagle Environmental 18369 Petroleum Drive Baton Rouge, LA 70809

Office: 225.757.0870 Fax: 225.757.8855 Mobile: 225.205.7096

# Charles.Brumfield@eaglered.com



From: Cathy Thompson Wilson [mailto:Cathy.Thompson@LA.GOV]

Sent: Monday, April 27, 2015 2:07 PM

To: Charles Brumfield

**Subject:** Al 195964 PER20150001

Not sure about the weather there, I know a lot of power outages are being reported. Just reminding you to email me the changes we talked about this morning concerning the loading hours and throughput. Take care and thanks.

### Message

From: George Hay [GHay@fmtinc.com]

Sent: 7/18/2018 2:35:44 PM

To: Galbraith, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=0abf7f5c1a5e462e8096cb58ef9757eb-MGALBRAI]

CC: Carl Palmer [cpalmer@tdxassociates.com]
Subject: Thermaldyne Dioxin Emissions Estimate

Mike,

The basis for the dioxin concentration in the Thermaldyne TO off gas is as follows:

Dioxin/furan emissions and thermal oxidizer destruction and removal efficiency (DRE) were measured during the compliance demonstration test (CDT) of the TD\*X Associates Model 6042 Indirect Thermal Desorption Unit (TDU). The testing was performed to meet the requirements for conducting a CDT as part of USEPA Region 6 Consent Agreement and Final Order (CAFO) effective October 4, 2012. This CDT was performed at the US Ecology Texas TSDF in Robstown, Texas. The testing period was September 24 and 25, 2013. Test results showed average dioxin/furan emissions of 0.0004 ng-TEQ/dscm at a corresponding DRE of 99.99991%. Emission estimates for the Thermaldyne unit were extrapolated using TD\*X stack test results of 0.0004 ng/dscm, divided by two, and ratio of TD\*X 99.99991% DRE to Thermaldyne 99% DRE = 2.2 ng/dscm. I believe that the Thermaldyne emissions may actually exceed this estimate for the following reasons.

The Thermaldyne primary desorption chamber in the TDU provides substantial gas residence time at temperatures that are optimal for dioxin formation. The unit does not have an OPL for organic chlorine in the feedstream. Our review of similar material provided for reclamation at our Robstown unit indicates that our OPL restricted chlorine containing OBHSM can contain 500 ppm organic chlorine, on average. Those constituents are vaporized in the TDU primary, along with the oil from the feedstream. The feedstream contains significant concentration of carcinogenic polynuclear aromatic hydrocarbons (cPAH). In our experience, those will average about 1000 ppm or more in the OBHSM feedstream. That represents 20 lb-cPAH/hr being present in the gaseous state in the primary, along with 10 lb-chlorine/hr from the organic chlorine that is also desorbed.

Thermaldyne does not provide an active nitrogen inerting system, but rather allows oxygen from air in-leakage into the primary to be consumed by partial combustion in the primary. This gas mixture in the primary is intimately contacted by 9000 lb/hr of dry solids from the refinery, containing a substantial inventory of catalyst sites. The gas temperature range in the countercurrent flow primary is approximately 500-1000°F. The gas residence time in the primary at this condition is 15 to 30 seconds. These conditions are ideal for dioxin formation in the Thermaldyne TDU primary. For reasons that I will not disclose herein, the proposed thermal oxidizer as designed will be unable to mitigate dioxins in the primary desorber vent gas steam to the MACT EEE standards.

But the point is how will Thermaldyne control the emissions of dioxins, and other restricted pollutants? They need to be required to fully characterize their feedstream, disclose the design of their unit as it is intended to manage the control of emission of restricted pollutants, adopt interim OPLs to meet emission limits, conduct a CPT to demonstrate compliance with emission limits, and adopt final OPLs to assure continued compliance. The OPLs should include key process parameters such as residence time, temperature and excess air in the TO. Probably should also include a CEMS to assure proper conditions in the TO. They should also include feedstream limits based on verified operation in compliance with emission limits. The proposed variance, including the air permit with its complete lack of conditions, does nothing to ensure that a hazardous waste combustor will not exceed emission limits.

Further comments on the Thermaldyne unit are considered confidential engineering analysis by TD\*X. We are reluctant to provide Thermaldyne with written engineering comments on their unit, however, we are happy to discuss them with you in a technical call. Please let me what day and time works best for you.

Respectfully,

George Hay

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 6 1445 Ross Avenue Dallas, Texas 75202-2733

JUN 2 4 2016

Mr. Estuardo Silva Louisiana Department of Environmental Quality Office of Environmental Services Waste Permits Division Post Office Box 4313 Baton Rouge, Louisiana 70821-4313

RE: Draft Hazardous Waste Modified Operating and Post Closure Permit

Chemical Waste Management, Inc.

7170 John Brannon Road

Carlyss, LA 70665

Permit# LAD00077201-OP-RN-MO-1

AI# 742/PER20140007

Dear Mr. Silva:

EPA has the following comments on the draft Hazardous Waste Operating and Post Closure Permit for the Chemical Waste Management, Inc. facility located at 7170 John Brannon Road, Carlyss, LA 70665 (Draft Permit). Chemical Waste Management, Inc. (Chem Waste) seeks to add two oil recovery units (ORUs), two thermal desorber units (TDUs), and 19 associated tanks to its operations at its Carlyss, Louisiana facility. The ORUs will be utilized to separate recoverable oils from drilling fluids, refinery tank bottoms, commercially exempt waste, and other non-hazardous and hazardous waste. The TDUs will treat contaminated tank bottoms, sludge, catalyst slurry oil, and other non-hazardous and hazardous waste. The TDUs will be designed to separate organic constituents from a waste stream by condensing the organic components, which would allow for the recovery or disposal of the contaminants. The non-condensable gases will be routed to a thermal oxidizer unit (TOU). The TDU is proposed to be permitted as a miscellaneous unit.

Condition II.E.25.e of the Draft Permit provides that "[o]ne hundred and eighty (180) days before planned construction, the Permittee must submit finalized engineering specifications and operating parameters for the proposed Thermal Desorber Units to the Administrative Authority for approval. The information submitted must comply with the requirements of this permit and L.A.C. 33:V. Chapter 32, and all applicable regulations." Chapter 32 is entitled "Miscellaneous Units", and is the State equivalent of 40 C.F.R. Part 264, Subpart X. Due to the absence of any proposed engineering specifications, performance test, operating conditions, operating parameters, monitoring and recordkeeping requirements, we have identified permit requirements for the TDU and TOU below that we believe are required by the regulations for operation of the TDU and TOU.

How the TDU and TOU are permitted determine the appropriate permit requirements for the units. The material being treated in the TDU and the TOU is already a hazardous waste. Thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA, 54 Fed. Reg. 50968, 50973 (December 11, 1989). The combustion of the non-condensable gases in the TOU meets the

definition of "thermal treatment" in L.A.C. 33:V.109 [40 C.F.R. § 260.10] and thus requires a RCRA permit. The TOU would meet the definition of incinerator in L.A.C. 33:V.109 [40 C.F.R. § 260.10] (an enclosed device that uses controlled flame combustion). However, rather than permitting the TOU as an incinerator, LDEQ could permit the TDU and TOU together as a miscellaneous unit under L.A.C. 33:V. Chapter 32 [40 C.F.R. Part 264, Subpart X]. If this occurs, then LDEQ is required to include in the permit requirements from L.A.C. 33:V. Chapters 3, 5, 7, 17, 19, 21, 23, 25, 27, 29, 31, 4301.F, H, 4302, 4303 and 4305, all other applicable requirements of L.A.C. 33:V. Subpart 1, and of 40 C.F.R. Part 63, Subpart EEE and 40 C.F.R. Part 146, that are appropriate for the miscellaneous unit being permitted.<sup>1</sup>

The decisions as to what appropriate requirements would be included in the permit would be left to LDEQ. However, we believe that the permit conditions would be similar to those set forth in the enclosed Consent Agreement and Final Order, In Re: US Ecology Texas, Inc. and TD\*X Associates, LP, EPA Docket Nos. RCRA-06-2012-0936 and RCRA-06-2012-0937, filed October 4, 2012. These permit conditions would include, but not be limited to: 1) a startup, shutdown, and malfunction plan; (2) a performance test, which includes meeting a 99.99% destruction removal efficiency for each principle organic hazardous constituent and meeting certain emission limits; (3) automatic waste feed cutoff system; (4) operating parameters; and (5) investigation, recordkeeping, testing, and reporting requirements. This position was also previously communicated to LDEQ in a letter from EPA to Mr. J. D. Head dated May 2, 2016, in which a copy was sent to LDEQ. A copy of this letter is also enclosed.

If you have any questions, please feel free to call me at (214) 665-8022.

Sincerely,

Susan Spalding

Associate Director

Hazardous Waste Branch (6MM-R)

Multimedia Division

Enclosure

<sup>&</sup>lt;sup>1</sup> The equivalent Federal provisions are 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146. 40 C.F.R. § 264.601.

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



REGION 6 1445 Ross Avenue Dallas, Texas 75202-2733

- 2 MAY 2016

Mr. J.D. Head Fritz, Byrne, Head & Fitzpatrick, PLLC 221 West 6<sup>th</sup> Street Suite 960 Austin, Texas 78701

Dear Mr. Head:

Thank you for your October 30, 2015 letter requesting clarification of the hazardous waste regulatory standards for thermal desorption units (TDUs) installed at RCRA treatment, storage, and disposal facilities (TSDFs). I apologize for the delay in responding to your request. In your scenario, the TDU reclaims oil from oil bearing hazardous wastes generated by petroleum refining, production, or transportation practices. You describe a TDU as a device that heats solid material to vaporize, remove, and separate organic constituent materials from solids. In the scenario you describe at a TSDF, the separated organic constituents are typically condensed and recovered as a liquid oil. The TDU process also generates a vent gas after the condensing stream.

Your inquiry also references 40 C.F.R. § 261.6(a)(3)(iv)(C)<sup>1</sup>, which provides that:

Oil reclaimed from oil-bearing hazardous waste from petroleum refining, production, or transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the used oil specification under 40 C.F.R. § 279.11 is not subject to regulation under 40 C.F.R. Parts 262 – 268, 270, or 40 C.F.R. Part 124, and is not subject to the notification requirements of Section 3010 of RCRA.

If the above conditions are met, then the reclaimed oil can be burned as a non-hazardous fuel. If the oil-bearing hazardous waste is not from petroleum refining, production, or transportation practices, then the reclaimed oil is subject to RCRA regulation.

If a TDU combusts all or a portion of the vent gas, combustion of the TDU vent gas from RCRA hazardous waste or recyclable materials [40 C.F.R. § 261.6(a)(1)] is considered thermal treatment that is regulated by RCRA. The material being treated (oil-bearing hazardous waste) is already a hazardous waste. Heating hazardous wastes to a gaseous state is subject to regulation under RCRA as treatment of hazardous waste, and thermal treatment after a material becomes a hazardous waste is fully regulated under RCRA. 54 Fed. Reg. 50968, 50973 (December 11, 1989). Thus, thermal treatment of the vent gas requires a RCRA permit.

<sup>&</sup>lt;sup>1</sup> Since you did not reference a specific State in which your client may operate a TDU, this letter cites to the applicable federal regulations. If the State has an authorized RCRA program, the corresponding state regulation would be applicable.

If the vent gas is combusted in the combustion chamber of the TDU, then a permit under 40 C.F.R. Part 264, Subpart O is required, because the TDU would meet the definition of incinerator in 40 C.F.R. § 260.10 (an enclosed device that uses controlled flame combustion). If, on the other hand, the vent gas is vented to and combusted in a thermal oxidizing unit (TOU), the permitting authority may be able to permit the entire unit (TDU and TOU) as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X. A RCRA permit would be required even if the facility is operating as a RCRA exempt recycling activity under 40 C.F.R. § 261.6(a)(3)(iv)(C). If the permitting authority decides to issue a 40 C.F.R. Part 264, Subpart X permit, the permitting authority is required to include in the permit requirements from 40 C.F.R. Part 264, Subparts I through O, AA, BB, and CC, 40 C.F.R. Part 270, 40 C.F.R. Part 63, Subpart EEE, and 40 C.F.R. Part 146 that are appropriate for the miscellaneous unit being permitted as required in 40 C.F.R. § 264.601. The decisions as to what appropriate requirements would be included in the permit would be left to the permitting authority. However, EPA would expect that the permit conditions would be similar to those set forth in the enclosed Consent Agreement and Final Order, In Re: US Ecology Texas, Inc. and TD\*X Associates, LP, EPA Docket Nos. RCRA-06-2012-0936 and RCRA-06-2012-0937, filed October 4, 2012.

If you have any questions, please feel free to contact Guy Tidmore of my staff at (214) 665-3142 or via e-mail at tidmore.guy@epa.gov.

Sincerely

John Blevins Director

Compliance Assurance and Enforcement Division

### Enclosure

Cc: Penny Wilson, ADEQ Lourdes Iturralde, LDEQ John Kieling, NMED Mike Stickney, ODEQ James Gradney, TCEO

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 DALLAS, TEXAS REGIONAL PTAPING CLERK EPA REGION VI US ECOLOGY TEXAS, INC., and DOCKET NOS. RCRA-06-2012-0936 TD\*X ASSOCIATES LP and RCRA-06-2012-0937 ) RESPONDENTS )

# **CONSENT AGREEMENT AND FINAL ORDER**

The Director of the Compliance Assurance and Enforcement Division of the United States Environmental Protection Agency (EPA), Region 6 (Complainant) and US Ecology Texas, Inc. and TD\*X Associates L.P. (Respondents) in the above-referenced proceeding, hereby agree to resolve this matter through the issuance of this Consent Agreement and Final Order (CAFO).

### I. PRELIMINARY STATEMENT

- 1. This proceeding for the assessment of civil penalties and the issuance of a compliance order is brought by EPA pursuant to Section 3008 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6928, as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), and is simultaneously commenced and concluded through the issuance of this Consent Agreement and Final Order (CAFO) pursuant to 40 C.F.R. §§ 22.13(b), 22.18(b)(2) and (3), and 22.37.
- 2. Notice of this action was given to the State of Texas prior to the issuance of this CAFO, as required by Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2).

- 3. For the purposes of this proceeding, the Respondents admit the jurisdictional allegations contained herein; however, the Respondents neither admit nor deny the specific factual allegations contained in this CAFO.
- 4. The Respondents explicitly waive any right to contest the allegations and their right to appeal the proposed Final Order set forth therein, and waive all defenses which have been raised or could have been raised to the claims set forth in the CAFO.
- 5. Compliance with all the terms and conditions of this CAFO shall resolve only those violations which are set forth herein.
- 6. The Respondents consent to the issuance of the CAFO hereinafter recited and consent to the issuance of the Compliance Order contained therein.

### II. FINDINGS OF FACT AND CONCLUSIONS OF LAW

### A. PRELIMINARY ALLEGATIONS

- 7. US Ecology Texas, Inc. (USET) is a corporation incorporated under the laws of the State of Delaware and authorized to do business in the State of Texas.
- 8. TD\*X Associates LP (TD\*X) is a limited partnership authorized to do business in the State of Texas.
- 9. "Person" is defined in 30 T.A.C. § 3.2(25) [40 C.F.R. §§ 260.10 and 270.2], and Section 1004(5) of RCRA, 42 U.S.C. § 6903(15) as "an individual, corporation, organization, government or government subdivision or agency, business trust, partnership, association, or any other legal entity."
- 10. The Respondent USET is a "person" as defined by 30 T.A.C. § 3.2 (25) [40 C.F.R. § 260.10], and Section 1004 (15) of RCRA, 42 U.S.C. § 6903(15).

- 11. The Respondent TD\*X is a "person" as defined by 30 T.A.C. § 3.2 (25) [40 C.F.R. § 260.10], and Section 1004 (15) of RCRA, 42 U.S.C. § 6903 (15).
- 12. "Owner" is defined in 30 T.A.C. § 335.1(108) [40 C.F.R. § 260.10] as "the person who owns a facility or part of a facility."
- 13. "Operator" is defined in 30 T.A.C. § 335.1(107) [40 C.F.R. § 260.10] as "the person responsible for the overall operation of a facility".
- 14. "Owner or operator" is defined in 40 C.F.R. § 270.2 as "the owner or operator of any facility or activity subject to regulation under RCRA."
- 15. "Facility" is defined in 30 T.A.C. § 335.1(59) [40 C.F.R. § 260.10] as meaning "all contiguous land, and structures, other appurtenances, and improvements on the land, used for storing, processing, or disposing of municipal hazardous waste or industrial solid waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them)."
- 16. The Respondent USET owns and operates a hazardous waste treatment, storage, and disposal (TSD) facility located at 3327 County Road 69, Robstown, TX 78380, EPA I.D. No. TXD069452340, Permit No. HW-50052-001.
- 17. The TSD identified in Paragraph 16 is a "facility" as that term is defined in 30 T.A.C. § 335.1(59) [40 C.F.R. § 260.10].
- 18. The Respondent USET is the "owner" and/or "operator" of the facility identified in Paragraph 16, as those terms are defined in 30 TAC § 335.1(107) & (108) [40 C.F.R. § 260.10] and 40 C.F.R. § 270.2.
  - 19. An oil reclamation unit is located at the facility identified in Paragraph 16.

- 20. The Respondent TD\*X owns and operates a thermal desorption unit (TDU), as well as the feed preparation system that includes a shaker tank (T-30), three mix tanks (T-31, T-32, and T-33), a centrifuge, and a surge tank (T-34) at the oil reclamation unit.
- 21. The Respondent TD\*X began operating the TDU and related equipment on or about June 15, 2008.
- 22. On or about June 8 11, 2010, June 14 17, 2010, and August 9 11, 2010, the Respondent USET's TSD facility and the oil reclamation unit were inspected by representatives of EPA pursuant to Section 3007 of RCRA, 42 U.S.C. § 6927.

### B. VIOLATIONS

### Count One - Processing Hazardous Waste Without a Permit or Interim Status

- 23. Pursuant to Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)], a RCRA permit or interim status is required for the processing (treatment), storage, or disposal of hazardous waste.
- 24. "Hazardous waste" is defined in 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3] as "any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 et seq."
- 25. "Recyclable materials" is defined in 30 T.A.C. §335.24(a) [40 C.F.R. § 261.6(a)(1)] as "hazardous wastes that are recycled".

<sup>&</sup>lt;sup>1</sup> The Texas Administrative Code uses the term "processing" instead of "treatment". The term "processing" as used by Texas is essentially equivalent to the term "treatment" as used in the federal statute and regulations.

- 26. The Respondent USET receives "hazardous waste" from off-site generators, as that term is defined by 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3].
- 27. The Respondent USET receives "recyclable materials" from off-site generators, as that term is defined by 30 T.A.C. § 335.24(a) [40 C.F.R. § 261.6(a)(1)].
- 28. Recyclable materials destined for oil reclamation are transferred to the Respondent TD\*X by the Respondent USET.
- 29. Processing (treatment) is defined in 30 T.A.C. § 335.1(122) [40 C.F.R. § 260.10] as follows:

The extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of solid waste or hazardous waste, designed to change the physical, chemical, or biological character or composition of any solid waste or hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The transfer of solid waste for reuse or disposal as used in this definition does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the executive director determines that regulation of such activity is necessary to protect human health or the environment, the definition of processing does not include activities relating to those materials exempted by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§6901 et seq., as amended.

- 30. On various dates after June 15, 2008, certain recyclable materials were processed in the tanks identified in Paragraph 20.
- 31. The recyclable materials identified in Paragraph 30 did not meet the exemption in 30 T.A.C. § 335.24(c)(4)(C) [40 C.F.R. § 261.6(a)(3)(iv)(C) because the hazardous wastes were not "oil-bearing hazardous wastes from petroleum refining, production, and transportation practices."

- 32. The Respondent TD\*X processed (treated) hazardous waste as that term is defined in 30 T.A.C. § 335.1(122) [40 C.F.R. § 260.10] in the tanks identified in Paragraph 20.
- 33. To date, neither the Respondent USED nor Respondent TD\*X has applied for nor received a RCRA permit or interim status to allow the processing (treatment) of hazardous waste in the tanks identified in Paragraph 20.
- 34. Therefore, the Respondent USET and the Respondent TD\*X have violated Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by processing (treating) hazardous waste without a RCRA permit or interim status.

### Count Two - Processing Hazardous Waste Without a Permit or Interim Status

- 35. Pursuant to Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)], a RCRA permit or interim status is required for the processing (treatment), storage, or disposal of hazardous waste.
- 36. "Hazardous waste" is defined in 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3] as "any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 et seq."
- 37. "Recyclable materials" is defined in 30 T.A.C. §335.24(a) [40 C.F.R. § 261.6(a)(1)] as "hazardous wastes that are recycled".
- 38. The Respondent USET receives "hazardous waste" from off-site generators, as that term is defined by 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3].

- 39. The Respondent USET receives "recyclable materials" from off-site generators, as that term is defined by 30 T.A.C. § 335.24(a) [40 C.F.R. § 261.6(a)(1)].
- 40. Recyclable materials destined for oil reclamation are transferred to the Respondent TD\*X by the Respondent USET.
- 41. On various dates after June 15, 2008, certain recyclable materials were fed into the TDU that did not meet the exemption in 30 T.A.C. § 335.24(c)(4)(C) [40 C.F.R. § 261.6(a)(3)(iv)(C) because the hazardous wastes were not "oil-bearing hazardous wastes from petroleum refining, production, and transportation practices."
- 42. Processing (treatment) is defined in 30 T.A.C. § 335.1(122) [40 C.F.R. § 260.10] as follows:

The extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of solid waste or hazardous waste, designed to change the physical, chemical, or biological character or composition of any solid waste or hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The transfer of solid waste for reuse or disposal as used in this definition does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the executive director determines that regulation of such activity is necessary to protect human health or the environment, the definition of processing does not include activities relating to those materials exempted by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§6901 et seq., as amended.

43. Thermal processing (thermal treatment) is defined in 30 T.A.C. § 335.1(149) [40 C.F.R. § 260.10] as follows:

the processing of solid waste or hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the solid waste or hazardous waste. Examples of thermal processing are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.").

- 44. The TDU uses heat from an indirect heated rotary dryer to separate the organic constituents from the hazardous waste feed material. A nitrogen carrier gas is used to transfer the vapor phase organic constituents to a gas treatment system. The oil is recovered by condensing vapor phase organic constituents in the gas treatment system. A portion of the TDU's recirculating nitrogen carrier gas, along with non-condensable gases, is vented, filtered, and then injected into the combustion chamber of the TDU, where it is burned.
- 45. The separation of the organic constituents from the hazardous waste in the TDU's indirectly heated rotary dryer constitutes thermal processing (thermal treatment) as that term is defined in 30 T.A.C. § 335.1(149) [40 C.F.R. § 260.10].
- 46. To date, neither the Respondent USET nor Respondent TD\*X has applied for nor received a RCRA permit or interim status to allow the thermal processing (thermal treatment) of hazardous waste in the TDU.
- 47. Therefore, the Respondent USET and the Respondent TD\*X have violated Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by thermally processing (thermally treating) hazardous waste without a RCRA permit or interim status.

### Count Three - Processing Hazardous Waste Without a Permit or Interim Status

- 48. Pursuant to Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)], a RCRA permit or interim status is required for the processing (treatment), storage, or disposal of hazardous waste.
- 49. "Hazardous waste" is defined in 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3] as "any solid waste identified or listed as a hazardous waste by the administrator of the United States

Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 et seq."

- 50. The Respondent USET receives "hazardous waste" from off-site generators, as that term is defined by 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3].
- 51. Hazardous wastes destined for oil reclamation are transferred to the Respondent TD\*X by the Respondent USET.
  - 52. On various dates after June 15, 2008, hazardous wastes were fed into the TDU.
- 53. The TDU uses heat from an indirect heated rotary dryer to separate the organic constituents from the hazardous waste feed material. A nitrogen carrier gas is used to transfer the vapor phase organic constituents to a gas treatment system. The oil is recovered by condensing vapor phase organic constituents in the gas treatment system. A portion of the TDU's recirculating nitrogen carrier gas, along with non-condensable gases, is vented, filtered, and then injected into the combustion chamber of the TDU, where it is burned.
- 54. Processing (treatment) is defined in 30 T.A.C. § 335.1(122) [40 C.F.R. § 260.10] as follows:

The extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of solid waste or hazardous waste, designed to change the physical, chemical, or biological character or composition of any solid waste or hazardous waste so as to neutralize such waste, or so as to recover energy or material from the waste or so as to render such waste nonhazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. The transfer of solid waste for reuse or disposal as used in this definition does not include the actions of a transporter in conveying or transporting solid waste by truck, ship, pipeline, or other means. Unless the executive director determines that regulation of such activity is necessary to protect human health or the environment, the definition of processing does not include activities relating to those materials exempted by the administrator of the United States Environmental Protection Agency in

accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§6901 et seq., as amended.

55. Thermal processing (thermal treatment) is defined in 30 T.A.C. § 335.1(149) [40 C.F.R. § 260.10] as follows:

the processing of solid waste or hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the solid waste or hazardous waste. Examples of thermal processing are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.")

- 56. The burning of gases in the TDU's combustion chamber constitutes thermal processing (thermal treatment) as that term is defined in 30 T.A.C. § 335.1(149) [40 C.F.R. § 260.10].
- 57. The combustion chamber of the TDU is an enclosed device that uses controlled flame combustion.
- 58. The combustion chamber of the TDU does not meet the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; nor meets the definition of infrared incinerator or plasma arc incinerator."
- 59. To date, neither the Respondent USET nor Respondent TD\*X has applied for nor received a RCRA permit or interim status to allow the thermal processing (thermal treatment) of hazardous waste in the combustion chamber of the TDU.
- 60. Therefore, the Respondent USET and the Respondent TD\*X have violated and continue to violate Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e) and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by thermally processing (thermally treating) hazardous waste without a RCRA permit or interim status.

### Count Four - Storing Hazardous Waste Without a Permit Or Interim Status

- 61. Pursuant to Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)], a RCRA permit or interim status is required for the processing (treatment), storage, or disposal of hazardous waste.
- 62. "Storage" is defined in 30 T.A.C. § 335.1(143) [40 C.F.R. § 260.10] as "the holding of solid waste for a temporary period, at the end of which the waste is processed, disposed of, recycled, or stored elsewhere."
- 63. Between on or about March 9, 2010, and June 11, 2010, the Respondent USET stored roll-off boxes in the area called the "Y" at the facility.
- 64. The roll-off boxes identified in Paragraph 63 contained material which had entered the oil reclamation process and was being temporarily staged before undergoing subsequent stages of the reclamation process. The Respondent USET discontinued the use of the area called the "Y" for this purpose.
- 65. "Hazardous waste" is defined in 30 T.A.C. § 335.1(69) [40 C.F.R. § 261.3] as "any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency in accordance with the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, 42 United States Code, §§ 6901 et seq."
- 66. The roll-off boxes identified in Paragraph 63 contained "hazardous waste" as that term is defined in T.A.C. § 335,1(69) [40 C.F.R. § 261.3].
- 67. The Respondent USET had not applied for nor received a RCRA permit or interim status to allow the storage of hazardous waste at the area called the "Y".

68. Therefore, the Respondent USET has violated Sections 3005(a) and (e) of RCRA, 42 U.S.C. §§ 6925(a) and (e), and 30 T.A.C. § 335.43(a) [40 C.F.R. § 270.1(b)] by storing hazardous waste without a RCRA permit or interim status.

### III. COMPLIANCE ORDER

69. Pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), the Respondents are hereby **ORDERED** to take the following actions and provide evidence of compliance within the time period specified below:

### A. Interim Operating Requirements

1. As of the effective date of this CAFO, feedstock for the oil reclamation unit shall consist only of non-hazardous waste, and oil-bearing hazardous waste from petroleum refining, production, and transportation practices. Oil-bearing hazardous waste from petroleum refining, production, or transportation practices includes the following listed hazardous waste from specific Petroleum Refining Sources (K049, K050, K051, K052, K169, and K170). Also acceptable is oil-bearing hazardous waste from processes which meet the definition of the following Standard Industrial Classification (SIC) codes and corresponding North American Industry Classification System (NAICS) codes (i.e., petroleum refining, production, and transportation practices) as follows:

SIC Code	SIC Description	NAICS Code	NAICS Title
1311	Crude Petroleum & Natural Gas	211111	Crude Petroleum and Natural Gas Extraction
1321	Natural Gas Liquids	211112	Natural Gas Liquid Extraction
1381	Drilling Oil & Gas Wells	213111	Drilling Oil and Gas Wells
1382	Oil & Gas Field Exploration Services (except geophysical mapping & surveying)	213112	Support Activities for Oil & Gas Operations
1389	Oil and Gas Field Services, NEC (except construction of field gathering lines, site	213112	Support Activities for Oil and Gas Operations

	preparation and related construction activities performed on a contract or fee basis)		
2911	Petroleum Refining	324110	Petroleum Refineries
4612 Crude Petroleum Pipelines		486110	Pipeline Transportation of Crude Oil
4613	4613 Refined Petroleum Pipelines		Pipeline Transportation of Refined Petroleum Products
4789	Transportation Services, NEC (pipeline terminals and stockyards for transportation)	488999	All Other Support Activities for Transportation
4922	Natural Gas Transmission	486210	Pipeline Transportation of Natural Gas
4923	Natural Gas Transmission and Distribution (distribution)	221210	Natural Gas Distribution
4923	Natural Gas Transmission and Distribution (transmission)	486210	Pipeline Transportation of Natural Gas
5171	Petroleum Bulk Stations and Terminals (except petroleum sold via retail method)	488999	All Other Support Activities for Transportation
5172	Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (merchant wholesalers)	424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)

- 2. Using feedstock from processes meeting the definition of the aforementioned SIC/NAICS Codes does not constitute compliance with 40 C.F.R. § 261.6(a)(3)(iv)(C) or this CAFO. The Respondents are required to make a separate determination whether the hazardous waste in question is "oil-bearing," and that the hazardous waste was originally generated from petroleum refining, production, or transportation practices.
- 3. As of the effective date of this CAFO, when the dryer feed is on, the Respondents shall operate the TDU in accordance with the interim operating parameters set forth in Appendix 1, Table A, which is attached and incorporated by reference into this CAFO. The Blending Protocols referenced in Appendix 1 is attached as Appendix 2, and incorporated by reference into this CAFO.

- 4. As of the effective date of this CAFO, Respondents shall comply with the Start-Up, Shutdown, and Malfunction Plan (SSM Plan) (CDT Plan, Appendix E). The Compliance Demonstration Test (CDT) Plan is attached as Appendix 3 and incorporated by reference into the CAFO.
- 5. Within sixty (60) days of the effective date of this CAFO, the Respondents shall conduct a tune-up of the external combustion chamber of the TDU in accordance with the following requirements:
- a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown.
- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specification.
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
- d. Optimize total emissions of carbon monoxide (CO). This optimization should be consistent with the manufacturer's specifications, if available.
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made.

  Measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made.
- f. Perform sampling and analysis of both dryer furnace stacks using Method TO-15, "Determination of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)". If the total

organic matter result is greater than 10 ppmV for either stack, the analysis shall include speciation of the gas. This information shall be included in the report required in Paragraph 69.A.5.g below.

- g. Maintain on-site a report documenting the concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume present, measured before and after the adjustments of the external combustion chamber of the TDU, and a description of any corrective actions taken as part of the combustion adjustment.
  - h. Subsequent tune-ups shall be conducted annually until the TDU is reconfigured.
- 6. Within sixty (60) days of the effective date of this CAFO, the Respondents shall conduct a fuel specification analysis of the purge vent gas for mercury and document that it does not exceed the maximum concentration of 40 micrograms/cubic meter of mercury using test methods ASTM D5954, ASTM D6350, ISO 6978-1:2003(E), or ISO 6978-2:2003(E), or an alternate test method approved by EPA. If the concentration of mercury exceeds 40 micrograms/cubic meter, the Respondents shall immediately notify EPA.
- 7. Within ninety (90) days of the effective date of this CAFO, the Respondents shall install, monitor, and operate an automatic hazardous waste feed cutoff (AWFCO) at the TDU in accordance with 40 C.F.R. § 63.1206(c)(3)(ii) and (iv) that immediately and automatically cuts off the hazardous waste feed when any component of the AWFCO system fails, or when one or more of the interim operating parameters set forth in Appendix 1, Table A that are designated as AWFCO parameters are not met. The Respondents shall also comply with the investigation, recordkeeping, testing, and reporting requirements of 40 C.F.R. § 63.1206(c)(3)(v), (vi) and (vii).
- 8. Within one year of the effective date of this CAFO, the Respondents shall reconfigure the TDU so that the non-condensable vent gases are routed to a thermal oxidizing unit (TOU)

instead of the combustion chamber of the TDU (Reconfigured TDU). After reconfiguration, fuel for the TDU is limited to natural gas and propane.

- 9. The Respondents shall operate the Reconfigured TDU during the shakedown period in accordance with the operating parameters limits set forth in Appendix 1, Table B when the dryer feed is on. The Respondent shall not operate the Reconfigured TDU more than 720 hours (including the shakedown period and the Compliance Demonstration Test). The Respondents shall keep records of the hours of operation during the shakedown period. The Respondents shall operate a continuous emissions monitor system (CEMS) for carbon monoxide (CO) for the TOU during the shakedown period. The Respondents shall operate the Reconfigured TOU in a manner that the hourly rolling averages for CO are not exceeded. The rolling averages shall be calculated in accordance with 40 C.F.R. §§ 63.1209(a)(6) and 63.1209(b)(5).
- 10. During the shakedown period, the Respondents shall monitor and operate an automatic hazardous waste feed cutoff (AWFCO) at the Reconfigured TDU in accordance with 40 C.F.R. § 63.1206(c)(ii) and (iv) that immediately and automatically cuts off the hazardous waste feed when any component of the AWFCO system fails, or when one or more of the operating parameter limits set forth in Appendix 1, Table B that are designated as AWFCO parameters are not met. The Respondents shall also comply with the investigation, recordkeeping, testing, and reporting requirements of 40 C.F.R. § 63.1206(c)(3) (v), (vi) and (vii).
- 11. The Respondents shall conduct a test measuring the concentration of CO in the exhaust gases from the TOU. This test shall include three one-hour runs during which the TDU is operated on oil-bearing hazardous waste. The emissions from the TOU stack shall be monitored for carbon monoxide and oxygen using EPA Method 10. The emissions shall be

demonstrated to be less than 100 ppmV CO corrected to 7% O<sub>2</sub> in each run. The test frequency shall be once during each six-month period, January 1 – June 30 and July 1 - December 31, said time period to commence after conducting the CDT and continuing until the TCEQ issues a RCRA Subpart X permit for the Reconfigured TDU. Within forty-five (45) days after conducting the test, the Respondents shall submit a test report to EPA summarizing the test results. The time periods for conducting the test may be changed to once during each twelve (12) month calendar period, January 1 - December 31, if the Respondents submit to EPA, with a copy to TCEQ, a detailed feed stream analysis plan that characterizes the waste received by the facility, and EPA approves the plan. The detailed feedstream analysis plan shall be prepared in accordance with 40 C.F.R. § 264.13 and the EPA Guidance Document "Waste Analysis At Facilities That Generate, Treat, Store, And Dispose of Hazardous Waste", OSWER 9938.4-03 (April 1994). The Respondents will implement the detailed feedstream analysis plan, as approved or modified by EPA, immediately upon receipt of EPA's approval.

- 12. The Respondents shall prepare a report for the time period beginning on the effective date of this CAFO and ending June 30, 2013, and every six (6) months thereafter. The report shall be submitted to EPA, with a copy to TCEQ, within thirty (30) days of the end of the reporting period. The report shall include the following:
- a. For each waste stream accepted by the oil reclamation unit, identify the customer, original generator, waste stream description, RCRA waste codes, the SIC or NAICS code of the process generating the waste, a summary of any analyses conducted by the Respondents to verify the waste stream profiles, and the total volume of waste accepted during the reporting period. If requested by EPA, the Respondents shall provide copies of relevant waste approval documents and manifests for the specific waste streams.

- b. All time periods in which there were exceedances of the operating parameters and the AWFCO requirements set forth in Appendix 1, Tables A and B, and exceedances of the hourly rolling averages for CO (Paragraph 69.A.9).
- c. All exceedances of the Reconfigured TDU Compliance Standards and the AWFCO requirements established in accordance with Paragraph 69.C.9.
- d. The initial Report shall include documentation showing that the tune-up and fuel specification analysis required by Paragraphs 69.A.5 and 69.A.6 have been conducted, and provide documentation showing the date of installation and subsequent operation of the AWFCO system required by Paragraphs 69.A.7.
- e. Documentation showing the installation of the TOU required by Paragraph 69.A.8, and the additional AWFCO requirements required by Appendix 1, Table B (Paragraph 69.A.10).

The Report may be submitted in an electronic format (i.e., compact disk). The Respondents may claim the report as confidential business information (CBI), in accordance with the requirements of 40 C.F.R. Part 2. However, information that is emissions data or a standard or limitation cannot be claimed as CBI. 40 C.F.R. § 2.301(e). If the Report contains any information that is claimed CBI, the Respondents shall provide a redacted version with all CBI deleted.

### **B.** RCRA Permit Modification

I. Within one year of the effective date of this CAFO, the Respondents shall submit to TCEQ, with a copy to EPA, an application for a Class 3 RCRA Permit Modification to permit the Reconfigured TDU as a miscellaneous unit under 40 C.F.R. Part 264, Subpart X in accordance with 30 T.A.C. § 335.152(a)(16) [40 C.F.R. Part 264, Subpart X], 30 T.A.C. Chapter 305 [40 C.F.R. §§ 270.10 – 270.14, 270.19, 270.23, and 270.30 – 270.33].